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ANNUAL REPORT
OF THE
COUNTY MEDICAL OFFICER OF HEALTH
FOR THE
YEAR 1908,
INCLUDING A
SUMMARY OF THE ANNUAL REPORTS OF THE
DISTRICT MEDICAL OFFICERS OF HEALTH.

BY

C. W. F. YOUNG, M.D., D.P.H.,
County Medical Officer of Health.

London:

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Printers in Ordinary to His Majesty.

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BOROUGH OF HORNSEY
TOWN CLERK'S OFFICE

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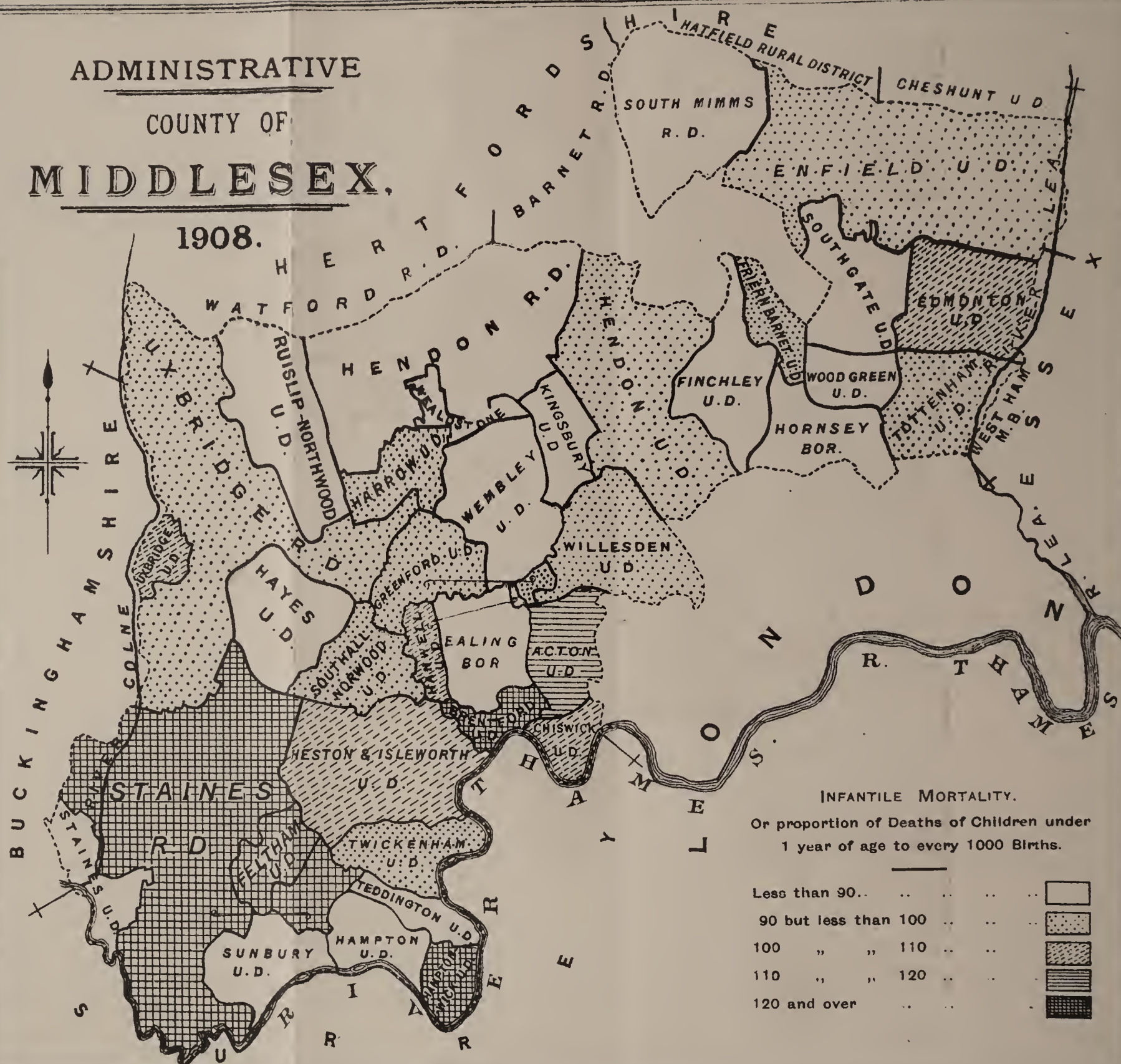
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ADMINISTRATIVE
COUNTY OF
MIDDLESEX.

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Administrative County of Middlesex.



REPORT on the Vital Statistics and Public Health Administration, 1908.

AREA. NUMBER OF DISTRICTS. INHABITED HOUSES.

The Administrative County of Middlesex comprises 148,700 acres, and contains 36 separate sanitary districts.

It adjoins the following other Administrative Counties, namely: Essex on the north-east; London on the south-east; Surrey on the south and south-east, the boundary being formed by the river Thames; Buckinghamshire on the west and Hertfordshire on the north.

The acreage of the County and the number of separate districts are set out in the following table :—

	Number.		Area in acres.		Inhabited houses.
	Census 1901.	1908.	1901.	1908.	Census 1901.
Municipal Boroughs	—	2	—	5,822	—
Urban Districts	29	30	88,105	93,970	125,204
Rural „	4	4	60,595	48,909	10,227
The County ..	33	36	148,700	148,701	135,431

The increase in the number of separate districts since the date of the census is due to the fact that three urban districts were newly created from parishes which in 1901 formed part of rural districts, viz., the urban district of Feltham, formerly a parish in Staines rural district; and the two urban districts of Hayes and Ruislip-Northwood, formerly parishes in the rural district of Uxbridge.

Twenty-nine of the present sanitary districts, namely, 23 urban and one rural district, each consist of a single parish, whilst seven districts each contain more than one parish. They are the following :—

Urban—

Brentford	2 parishes.
Greenford	3 „
Heston and Isleworth	2 „
Uxbridge	2 „

Rural—

Hendon	..	..	5	parishes.
Staines	..	..	10	„
Uxbridge	..	..	7	„

As regards the number of inhabited houses, it is not possible to give information as to what this may now be in the County as a whole, as figures on the subject are not given in all the district reports. At the date of the last census, 1901, the number was found to be 135,431, whilst 3,781 houses were in course of erection.

During the period which has elapsed, increase in the number of dwelling houses has taken place in Middlesex at an extraordinary rate, this being accounted for by the position of the County area in relation to the Metropolis, and the extensions which have taken place in recent years in the means of locomotion by the construction of new railways and tramways.

POPULATION.

In the reports of the last few years I have explained the different methods which may be used for arriving at an estimate of the population of a district during intercensal periods, and I have given the reasons why, in the case of the various sanitary areas in Middlesex, it has usually been considered that the most accurate estimate of the population is likely to be obtained by taking the number of inhabited houses at the middle of the year under review, and multiplying this by the average number of persons per inhabited house at the time when the previous census was taken.

This method, it is obvious, introduces as a possible source of error the assumption that the mode of occupation of houses in the area is of the same character as it was at the census. In the case of Middlesex and of other parts of what is known as Outer London, the possibility of this as a source of error is a real one, as during the seven years which have elapsed between the date of the census in 1901 and the middle of 1908, considerable changes in the class of population and in the style of house have taken place in the suburbs around the metropolis.

It is obvious, therefore, that even after the exercise of the greatest care, it is not possible, at such an interval since the last census, to avoid feeling that the estimate of the population may differ to a material extent from the actual population.

The gross population at the middle of 1908 of the area forming the administrative County is taken in this report as the sum total of the estimates given by the local medical officers of health for their respective districts, in other words, the estimated population of Middlesex at the middle of 1908 was 1,093,355.

The enumerated population at the dates of the census of 1891 and 1901 are shown in the following table, together with the estimated population for 1908:—

Population.

11

	Population (enumerated).				Population Estimated.
	1891.		1901.		Middle 1908.
	Persons.	Males.	Females.	Persons.	Persons.
Urban Districts ..	501,470	346,087	395,062	741,149	1,041,190
Rural Districts ..	41,424	24,974	26,191	51,165	52,165
The County.. ..	542,894	371,061	421,253	792,314	1,093,355

It will be noted in the foregoing table that the difference in the population of the rural districts in 1908 and 1901 is but small, and it might be inferred from this that little increase had taken place in these areas in the interval. This, however, is not the explanation of the apparently small increase; the areas known as rural in 1901 included three parishes which have since been converted into urban areas, and consequently their population has now been transferred to that of the urban districts.

The amount of increase which it is estimated has taken place in each year since the census will be seen from the following figures:—

Census 1901	..	..	792,314		
Estimated middle 1902			832,725, or an estimated		
				increase of 40,411	
„	„	1903	886,629	„	„ 53,904
„	„	1904	936,966	„	„ 50,337
„	„	1905	974,067	„	„ 37,101
„	„	1906	1,015,059	„	„ 40,992
„	„	1907	1,059,684	„	„ 44,625
„	„	1908	1,093,355	„	„ 33,671

In the following table are set out in detail the enumerated population in 1901, and the estimated population 1908 of each of the constituent districts:—

District.						Census 1901.	Estimated middle 1908.
URBAN.							
Acton	..	..	..	..	..	37,744	55,000
Brentford	..	..	..	..	..	15,171	16,194
Chiswick	..	..	..	..	..	29,309	36,377
Ealing (<i>Borough</i>)	..	..	..	..	..	33,031	51,000
Edmonton	{	District	..	..	..	44,911	60,182 }
		Institutions ¹	..	..	..	1,988	
Enfield	..	..	..	..	..	42,738	56,185
Feltham	..	..	..	..	..	4,534	5,900
Finchley	..	..	..	..	..	22,126	39,499
Friern Barnet	{	District	..	..	..	8,816	10,422 }
		Asylum ²	..	..	..	2,750	
Greenford	..	..	..	..	..	819	1,074
Hampton	..	..	..	..	..	6,813	9,500
Hampton Wick	..	..	..	..	..	2,606	2,665
Hanwell	..	..	..	..	..	10,438	20,682
Harrow	..	..	..	..	..	10,220	16,132
Hayes	..	..	..	..	..	2,594	3,500
Hendon	{	District	..	..	..	21,685	31,784 }
		Institutions ³	..	..	..	765	
Heston and Isleworth	..	..	..	..	..	30,863	34,895
Hornsey (<i>Borough</i>)	..	..	..	..	..	72,056	90,814
Kingsbury	..	..	..	..	..	757	820
Ruislip-Northwood	..	..	..	..	..	3,566	5,656
Southall-Norwood	{	District	..	..	..	10,365	22,371 }
		Asylum ⁴	..	..	..	2,835	
Southgate	..	..	..	..	..	14,993	32,000
Staines	..	..	..	..	..	6,688	7,218
Sunbury	..	..	..	..	..	4,544	4,730
Teddington	..	..	..	..	..	14,037	18,125
Tottenham	..	..	..	..	..	102,541	143,383
Twickenham	..	..	..	..	..	20,991	27,000
Uxbridge	..	..	..	..	..	8,585	9,450
Wealdstone	..	..	..	..	..	5,901	11,775
Wembley	..	..	..	..	..	4,519	9,606
Willesden	..	..	..	..	..	114,811	149,035
Wood Green	..	..	..	..	..	34,233	50,500
RURAL.							
Hendon	..	..	..	..	..	8,647	12,924
South Mimms	..	..	..	..	..	2,671	2,867
Staines	..	..	..	..	..	18,095	22,804
Uxbridge	..	..	..	..	..	11,058	13,570

¹ The Strand Union Workhouse and Edmonton Union Workhouse, in which sick persons from other districts are lodged, and the Strand Union School's.

² London County Lunatic Asylum (Colney Hatch).

³ Cleveland Street Sick Asylum (Strand district) and Hendon Union Workhouse, in which sick persons from outside districts are lodged.

⁴ London County Lunatic Asylum (Hanwell).

In the case of some of the districts in the County the population has in the foregoing table been given under two headings, namely, district population and institutions. Owing to the position of Middlesex on the outskirts of London, it comes about that many institutions for the treatment of sick or infirm persons have been erected in the County for the use of London residents. These, of course, cannot rightly for statistical purposes be regarded as part of the County, and with a view to correcting the statistics of the County and especially of the districts in which these institutions happen to be, it is necessary that deaths amongst the inmates—and their death-rate would naturally be a high one—should be excluded. It is also necessary to exclude the whole of the alien population of which they form a part.

On the other hand, it has to be remembered that the two lunatic asylums which house residents of Middlesex are not situated within the County area, and the deaths occurring in these asylums, together with their average yearly population, must be included in the County total. Making correction in the above way it is found that the *statistical population* for 1908 is 1,090,708, as compared with the *gross estimated population* of 1,093,355.

Correction is also made by the inclusion of the deaths of residents of the County which were registered elsewhere. The County Council has made arrangement for obtaining information as to the latter deaths, and at the beginning of each year they are distributed to the district to which they rightly belong. In an appendix to Table I, at the end of this volume, details are set out of the nature of the corrections made.

The vital statistics for the year 1908 in the following account are based upon the *statistical population*, namely, 1,090,708, given above.

BIRTHS.

From the figures given in the tables attached to the annual reports of the district medical officers of health it appears that during 1908 the births of 27,778 children were registered in the County area. This number is only ten in excess of the total number registered in 1907, and is equivalent to a birth-rate of 25·5 per 1,000 persons living, or, in other words, the lowest rate since 1901. The steady decline in the birth-rate noticeable during these years is part of a general decline which has been going on in the country as a whole, as will be seen by the rates given in the following table for the purpose of comparison. It will be noticed, however, that for 1908 the rate in England and Wales was 0·2 per 1,000 above that of 1907, which was the lowest birth-rate recorded.

The rates for recent years are as follows:—

Birth-rates.

Years.	The County.		England and Wales.*	London.*	76 Great Towns.*
	Births.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1901	22,500	28·4	28·5	28·8	—
1902	23,763	28·5	28·6	28·4	30·0
1903	25,342	28·6	28·4	28·3	29·7
1904	26,392	28·3	27·9	27·7	29·1
1905	26,501	27·3	27·2	27·0	28·2
<i>Average, 1901-1905</i>		<i>28·2</i>	<i>28·1</i>	<i>28·0</i>	<i>—</i>
1906	27,035	26·7	27·0	26·5	27·8
1907	27,768	26·3	26·3	25·6	27·0
1908	27,778	25·5	26·5	25·2	26·9

* The yearly rates for England and Wales, London, and 76 Great Towns, are taken from the Annual Summaries of the Registrar-General. The average for England and Wales, for the years 1901-1905, is from the 68th Annual Report of the Registrar-General. The London birth-rate is corrected for births occurring in lying-in institutions.

COUNTY OF MIDDLESEX, 1908.

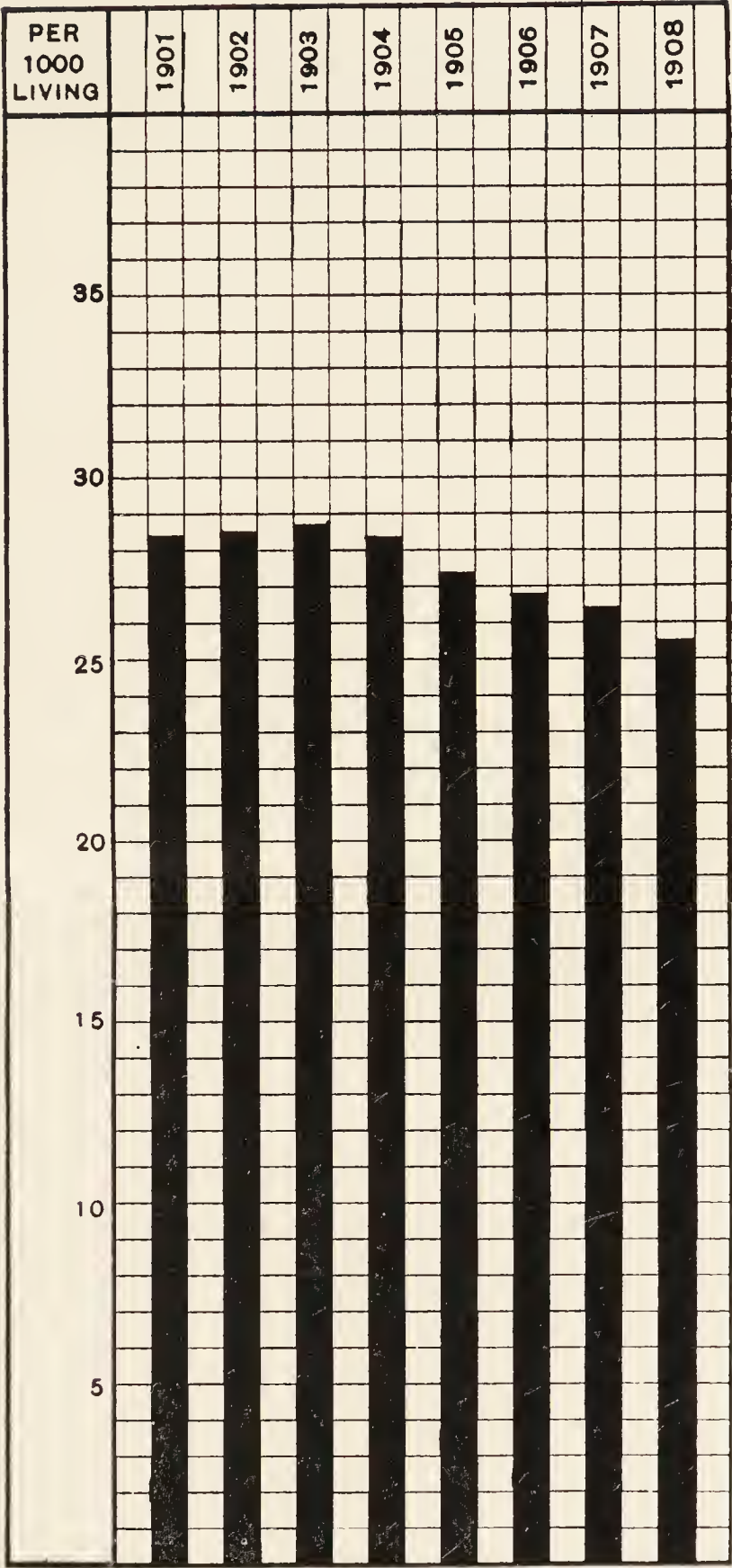


DIAGRAM 1,
SHOWING BIRTH-RATE PER 1,000 PERSONS LIVING.

In the 70th annual report of the Registrar-General (1907), which is the last issued, the subject of the decline in the birth-rate is dealt with at some length. It is pointed out that in England and Wales the highest birth-rate was recorded in 1876, viz., 36·3 per 1,000, and that since then it has steadily declined, with occasional slight fluctuations. Several factors are mentioned as affecting the birth-rate, viz., changes in the age constitution of the married female population, changes in the marriage-rate, changes in the proportion of women of conceptive ages in the population, and a table is given showing in figures the extent of these changes in the four last census periods. Finally in the following quotation is stated the conclusion arrived at as to the part played by various influences in bringing about the decreased birth-rate.

“As the birth registers do not afford information respecting the ages of the mothers, there are no means of ascertaining the fertility of women at the several ages comprised in the child-bearing period; there are, however, sufficient grounds for stating that during the past 30 years approximately 14 per cent. of the decline in the birth-rate [based on the proportion of births to the female population aged 15–45 years] is due to the decrease in the proportion of married women in the female population of conceptive ages, and that over 7 per cent. is due to the decrease of illegitimacy. With regard to the remaining 79 per cent. of the decrease, although some of the reduced fertility may be ascribed to changes in the age constitution of married women, there can be little doubt that much of it is due to deliberate restriction of child-bearing.”

Further, the Registrar-General points out that if comparison be made of the birth-rate of England and Wales with other European countries, calculating these rates not as proportions of births to the total population, but as proportions of legitimate births to the married women, aged 15-45 years, *i.e.*, the child-bearing period, it appears "that at the last census period, 1900-02 the fertility of English wives was lower than that recorded in any European country except France." The legitimate birth-rates (per 1,000 wives, aged 15-45) vary from 315 in the Netherlands, 302 in Norway, 290 in Prussia, 289 in Ireland and 284 in the German Empire, to 235 in England and Wales and 157 in France. All European countries show a decline in the birth-rate during the 20 years preceding the above date, except Ireland, Austria, and Spain, but the highest decreases are, in Belgium a decrease of 19·8, in France 19·7 and in England and Wales 17·7.

In the following table the number of births and the crude birth-rate, that is the birth-rate per 1,000 persons living, in each district in the County are set out.

At the beginning of each year returns are obtained from certified midwives of the number of births which they attended in their capacity as midwives and not as nurses with a doctor. Details of this are given in the section dealing with the Midwives Act later in the report and subject to the remarks made there it appears that over 8,000, or about one-third of the births, were attended by these women.

Births and Birth-rates in each District, 1908.

Births.

19

District.	Number,	Rate per 1,000 living.	District.	Number.	Rate per 1,000 living.
URBAN.			Kingsbury ..	19	23.1
Acton ..	1,568	28.5	Ruislip-Northwood ..	122	21.5
Brentford ..	464	28.6	Southall-Norwood ..	660	29.5
Chiswick ..	898	24.6	Southgate ..	659	20.6
Ealing (<i>Borough</i>) ..	1,251	24.5	Staines ..	158	21.9
Edmonton ..	2,000	32.1	Sunbury ..	109	23.0
Enfield ..	1,420	25.2	Teddington ..	442	24.3
Feltham ..	155	26.2	Tottenham ..	3,778	26.3
Finchley ..	888	22.4	Twickenham ..	751	27.8
Friern Barnet ..	333	31.9	Uxbridge ..	228	24.1
Greenford ..	31	28.8	Wealdstone ..	303	25.7
Hampton ..	206	21.6	Wembley ..	234	24.3
Hampton Wick ..	40	15.0	Willesden ..	4,095	27.5
Hanwell ..	493	23.8	Wood Green ..	1,282	25.3
Harrow ..	346	21.4	RURAL.		
Hayes ..	103	29.4	Hendon ..	251	19.4
Hendon ..	787	24.7	South Mimms ..	66	23.0
Heston and Isleworth ..	1,211	34.7	Staines ..	601	26.3
Hornsey (<i>Borough</i>) ..	1,485	16.3	Uxbridge ..	341	25.1

DEATHS.

The total number of deaths occurring amongst residents of Middlesex, that is the deaths, after exclusion of deaths of non-residents registered in the County, and inclusion of the deaths of residents who died in institutions outside the County, was 11,872.

This gives a *recorded* death-rate of 10·8 as compared with 11·1 in 1907.

With a view to comparison with other parts of the country it is necessary further to correct this rate for differences in the *age and sex constitution*, as shown at the last census, between the Middlesex population and that of England and Wales. This can be done by multiplying the *recorded* death-rate by a factor calculated for the purpose.

As a result, it is found that the death-rate of Middlesex *corrected for age and sex constitution* is 11·4. This shows a decrease of 0·3 per 1,000 persons compared with the rate of the previous year.

COUNTY OF MIDDLESEX, 1908.

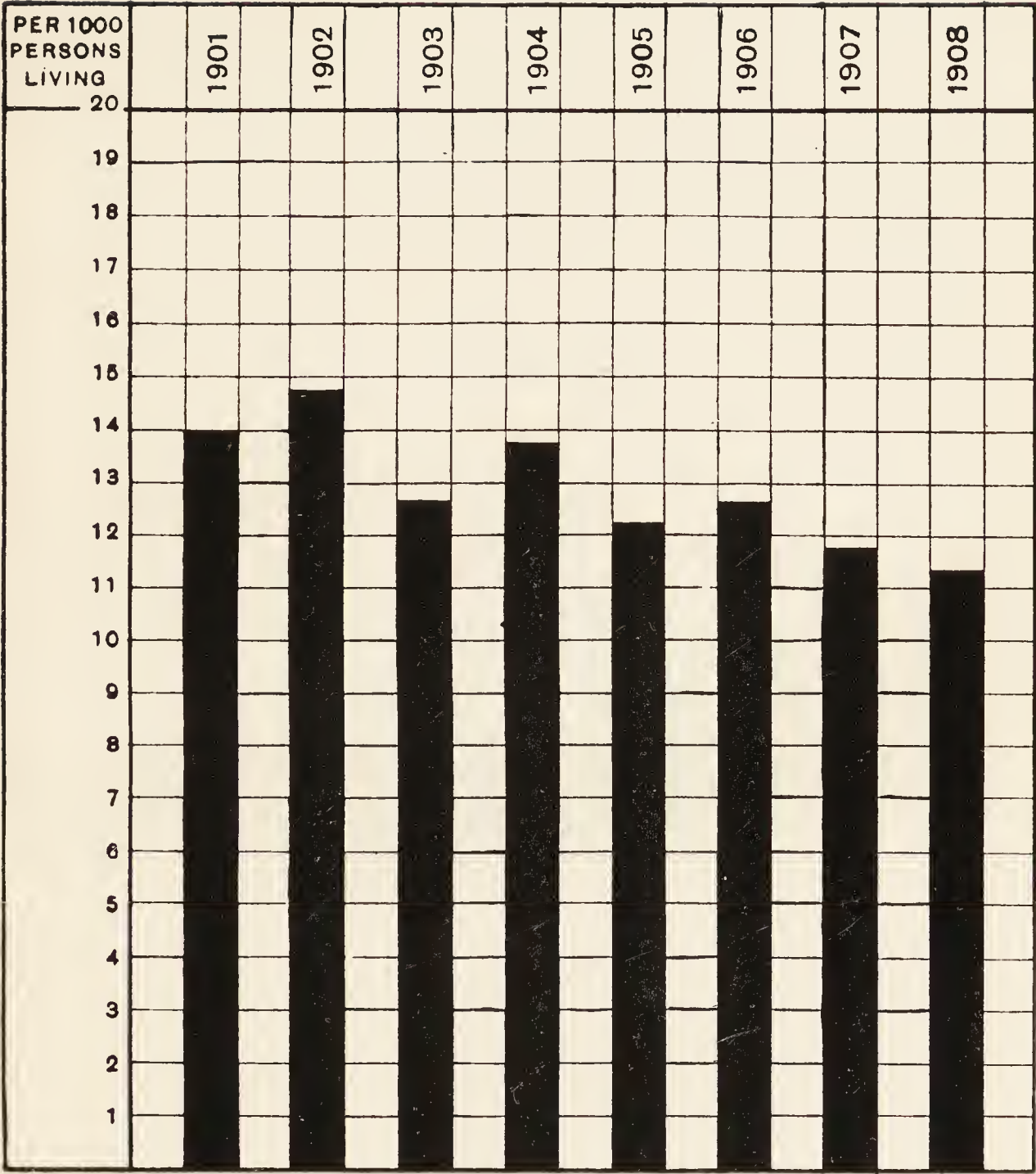


DIAGRAM 2,
SHOWING DEATH-RATE FROM ALL CAUSES
PER 1,000 PERSONS LIVING
(CORRECTED FOR AGE AND SEX DISTRIBUTION).

In the following table are given the figures and rates for the County since 1900, also the rates of other parts, for comparison :—

Deaths and Death-rates. All Causes.

Year.	The County.		London.†	England and Wales.†	76 Great Towns.†
	Deaths (corrected).	Rate per 1,000 living.*	Rate per 1,000 living.*	Rate per 1,000 living.	Rate per 1,000 living.*
1901	10,562	14·0	18·7	16·9	—
1902	11,675	14·7	18·6	16·2	—
1903	10,645	12·6	16·4	15·4	—
1904	12,199	13·8	17·4	16·2	18·3
1905	11,233	12·2	15·8	15·2	16·7
<i>Average, 1901–1905</i>		<i>13·4</i>	—	<i>16·0</i>	—
1906	12,244	12·7	15·8	15·4	16·8
1907	11,774	11·7	15·3	15·0	16·3
1908	11,872	11·4	14·5	14·7	15·8

* Corrected for age and sex distribution.

† From the Annual Summaries of the Registrar-General, except the *average* rate for England and Wales, which is from the 68th Annual Report of the Registrar-General.

It will be noticed in the above table that the actual number of deaths in Middlesex has increased but little compared with 1907, and is actually less than in 1906, although according to the estimated population of the area the number represents the deaths of a population which has increased during the past twelve months by 30,000 residents. The consideration which arises is whether this does not indicate that the population may have been over-estimated.

In previous years I set out for comparison the death-rates of those districts in the County of London which abut upon Middlesex, and it will be well to do so for the year under consideration. The rates given are taken from the annual summary of the Registrar-General:—

Death-rates, 1908 (corrected for Age and Sex).

Hammersmith	..	14·5	St. Pancras	..	15·3
Kensington	..	13·8	Islington	..	13·7
Paddington	..	13·2	Stoke Newington	..	12·8
St. Marylebone	..	15·1	Hackney	..	13·7
Hampstead	..	9·5	Middlesex	..	11·4

Causes of Death.

The various causes of death which contributed to make up the total of 11,872 deaths in the County are given in the following table. These are shown in six separate age groups and have been fully corrected by inclusion of deaths occurring and registered outside the County area and exclusion of deaths of non-residents.

*County of Middlesex—Deaths classified by Cause and Age
and Corrected for Deaths in Institutions, 1908.*

CAUSE OF DEATH.	0—	1—	5—	15—	25—	65 and up- wards.	Total at All Ages.
Smallpox	—	—	—	—	—	—	—
Measles.. ..	48	157	17	—	—	—	222
Scarlet Fever	1	43	35	4	5	—	88
Whooping Cough	78	78	7	—	—	—	163
Diphtheria and Mem- branous Croup	5	87	53	3	4	—	152
Croup	—	6	2	—	—	—	8
Typhus.. ..	—	—	—	—	—	—	—
Enteric.. ..	—	—	8	8	22	—	38
Continued Fever	—	—	—	—	—	1	1
Influenza	12	19	10	11	119	116	287
Cholera.. ..	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—
Diarrhoea	358	69	2	1	7	20	457
Enteritis	124	34	11	18	46	14	247
Puerperal Fever	—	—	—	8	26	—	34
Erysipelas	7	1	—	—	8	6	22
Other Septic Diseases.. ..	9	—	5	8	30	4	56
Phthisis	9	24	28	147	659	32	899
Other Tuberculous Diseases	106	118	72	24	46	2	368
Cancer	—	2	2	9	541	319	873
Bronchitis	176	60	6	2	110	438	792
Pneumonia	279	228	27	25	308	155	1,022
Pleurisy	1	1	2	—	23	13	40
Other Respiratory Diseases	22	21	6	3	51	59	162
Alcoholism and Cirrhosis of the Liver	—	—	1	2	110	32	145
Venereal Diseases	20	2	—	2	10	1	35
Premature Birth	495	—	—	—	—	—	495
Childbirth	—	—	—	4	46	—	50
Heart Diseases.. ..	—	5	35	46	743	831	1,660
Accident	70	44	32	25	132	50	353
Suicide	—	—	—	8	107	8	123
All other causes	835	158	98	87	776	1,126	3,080
Total from All Causes	2,655	1,157	459	445	3,929	3,227	11,872

The deaths in the foregoing table are those of Middlesex residents, including those occurring in institutions and registered outside the County area. The County Council has continued to obtain information necessary for the purpose of correcting not only the number of deaths rightly belonging to the County, but also information for the purpose of distributing to each sanitary area at the beginning of the year those deaths belonging to these areas, but which happen to occur either in an institution elsewhere in the County or outside the County.

From the figures in the table it will be seen that the largest number of deaths from any one disease was that credited to heart disease; next to this comes tuberculosis in all its forms, then pneumonia, cancer and bronchitis in the order mentioned.

District Rates.

In the next table are given the death-rates of each sanitary district, and in order that comparison may be made between one and another district, the rates in the last columns are given after they have been corrected for the disturbing influence of differing age and sex constitution of the population.

As regards some of the districts, it should be pointed out that owing to the small population which they contain the rates of any single year must not be taken as necessarily representing a marked change in the health conditions of the areas. The smaller the figures upon which a rate is based, the more likely it is to show considerable fluctuation from time to time. In such cases it is

COUNTY OF MIDDLESEX, 1908.

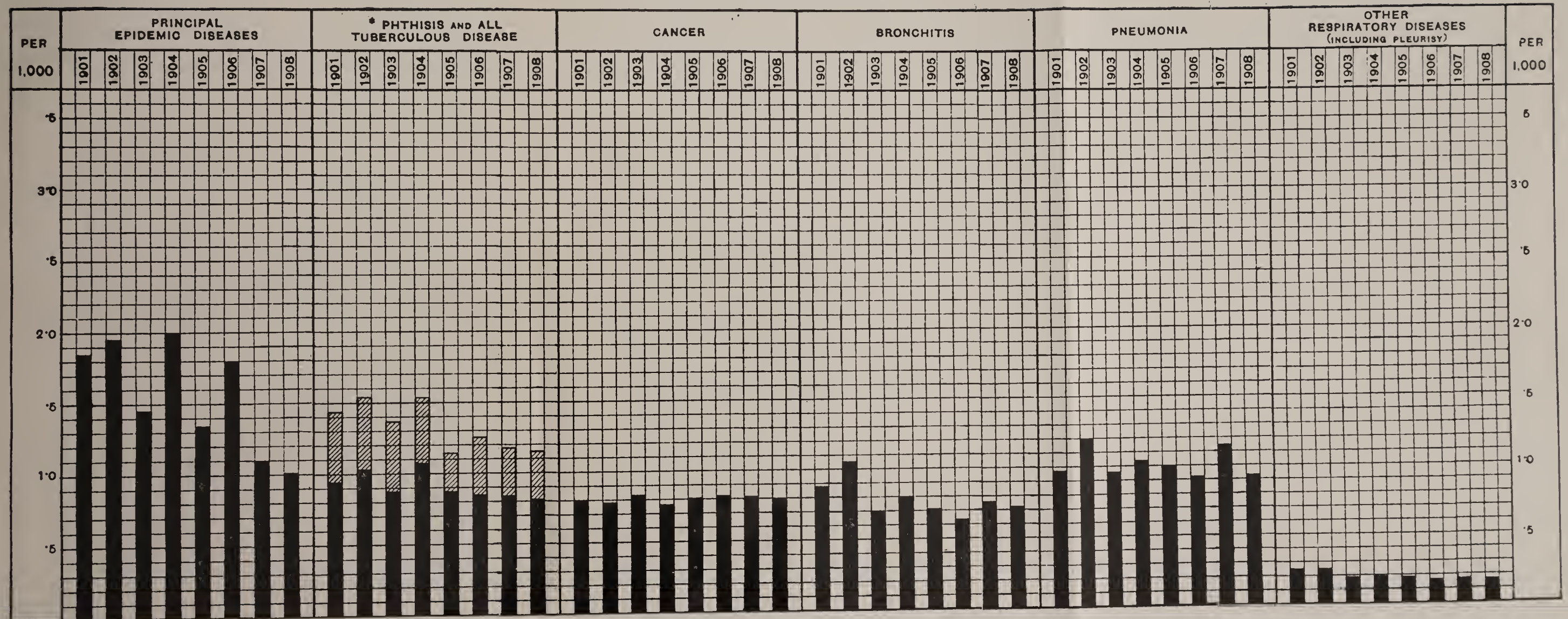


DIAGRAM 3,
SHOWING DEATH-RATES PER 1,000 PERSONS LIVING FROM CERTAIN DISEASES.

* Black columns represent Phthisis or Pulmonary Consumption. Black columns *plus* hatched columns represent *all Deaths* from Tuberculous Disease.

desirable to consider the rates for several years, and for this purpose the recorded rates for several years past in each district are given in the later part of the report.

Excluding from consideration the smaller districts, namely, those with populations under 5,000, the highest death-rates in 1908, are those of Heston and Isleworth, Brentford, Uxbridge (urban), Acton and Staines (rural), all of which have a death-rate of 13 per 1,000 living or more, compared with the rate of 11·4 for the County as a whole.

It is necessary to point out as regards *Heston and Isleworth* that in all probability the population of 1908 upon which the rate is based is underestimated, and if this is so it is too high. Dr. Steegmann points out that if estimate of the population be made upon the number of houses known to be inhabited, the population should be 40,323 and upon this estimated population the nett death-rate would be 13·8 instead of 15·9. This he regards in all probability as more nearly approximating to the real death-rate of the area and if this be corrected for age and sex distribution the rate for comparison with other districts should be 13·9 instead of 16·1 per 1,000.

As regards *Brentford*, it is satisfactory to be able to report that the general death-rate for 1908, although still a high one, shows a distinct improvement upon that of 1907. Last year it was stated that the existence of insanitary property in Brentford had been pointed out by one of the medical inspectors of the Local Government Board, who had inspected the district, as needing vigorous action by the sanitary authority. Details as to the work

which has been done during 1908 in regard to this will be found in the section, later in this report, dealing with housing, but it will be well here to quote the following remark of Dr. Bott, the local medical officer of health, in concluding his account of the work which has been done:—

“It will be seen from the above that something has been done to remove the black spot from Brentford, but very much more will be required before the town can be modernized. There are scores of back to back houses very old and dilapidated, which ought to be closed.”

In the case of *Uxbridge (urban)* the general death-rate has been high for several years, and the rate of 1908 is slightly in excess of that of 1907. Dr. Lock states that the unusual number of deaths from accidents and suicides would account for the increase, but he draws attention to the fact that of the two parishes which form the district the higher rate occurred in Uxbridge parish, which also had a greater proportion of cases of infectious disease, and this he considers is due to “the less sanitary condition” of this part of the town. Further, he specially refers to the following matters, as of importance from the point of view of the public health:—the need of by-laws being framed and adopted as to houses let in lodgings, the unsatisfactory arrangement at present in force for a weekly collection of house refuse, which it appears has been the subject of correspondence between the Local Government Board and the local authority, and the need of disposing of house refuse by some other method than that of “tipping” it in too close proximity to houses

He states that he recommended the sanitary authority to adopt the Public Health Acts Amendment Act, 1907, but they decided not to do so.

With a general death-rate, which ranks as one of the higher rates in the County, it behoves the authority to take all steps which may place them in a position for controlling as adequately as possible any insanitary conditions which exist or may arise in the area under their control.

In the case of *Acton* the recorded death-rate shows a decrease of 0·8 compared with 1907, and Dr. Thomas, by an analysis of the death-rates of the different wards of the district, shows that improvement is most marked in that part having the highest death-rate. He concludes that although in this ward the higher death-rate, as compared with the rest of the district, is partly to be accounted for by the age constitution of the population, social and housing conditions have considerable influence in bringing it about. The reduction in the death-rate of this part may, therefore, be taken as a reflection of the value of the public health administration of the district.

In the following table the recorded death-rates of each district, and these rates corrected for age and sex distribution, are given:—

Death-rates corrected for Age and Sex Distribution.

—			Standard Death- rate.	Factor for Correction for Age and Sex dis- tribution.	Recorded Death- rate 1908.	Corrected Death- rate 1908..
<i>Urban.</i>						
Acton .. ..	..	..	17·45	1·04240	13·16	13·71
Brentford .. ..	..	..	17·51	1·03859	14·88	15·45
Chiswick .. ..	..	..	17·30	1·05174	12·17	12·79
Ealing (<i>Borough</i>) ..	..	..	17·03	1·06804	11·23	11·99
Edmonton .. ..	..	..	17·87	1·01785	12·16	12·37
Enfield .. ..	..	..	17·29	1·05198	11·12	11·69
Feltham ⁽¹⁾	—	—	14·23	—
Finchley .. ..	..	..	16·81	1·08227	8·58	9·28
Friern Barnet .. ..	..	..	16·89	1·07740	11·51	12·40
Greenford .. ..	..	..	19·78	·91982	15·83	14·56
Hampton .. ..	..	..	17·78	1·02300	9·79	10·01
Hampton Wick .. ..	..	..	17·71	1·02716	13·51	13·87
Hanwell .. ..	..	..	16·84	1·08040	9·91	10·70
Harrow .. ..	..	..	15·71	1·15834	7·07	8·18
Hayes ⁽¹⁾	—	—	10·29	—
Hendon .. ..	..	..	17·15	1·06063	10·03	10·63
Heston & Isleworth*..	..	..	18·02	1·00977	15·99	16·14
Hornsey (<i>Borough</i>) ..	..	..	15·97	1·13919	8·28	9·43
Kingsbury .. ..	..	..	16·91	1·07600	6·09	6·55
Ruislip-Northwood ⁽¹⁾	—	—	7·25	—
Southall-Norwood ..	..	..	17·31	1·05131	9·88	10·38
Southgate .. ..	..	..	17·40	1·04533	7·50	7·83
Staines .. ..	..	..	17·50	1·03948	10·11	10·50
Sunbury .. ..	..	..	18·09	1·00575	13·53	13·60
Teddington .. ..	..	..	17·37	1·04726	10·21	10·69
Tottenham .. ..	..	..	16·86	1·07931	11·02	11·89
Twickenham .. ..	..	..	17·64	1·03123	12·25	12·63
Uxbridge .. ..	..	..	18·83	·96628	15·02	14·51
Wealdstone .. ..	..	..	16·07	1·13203	7·81	8·84
Wembley .. ..	..	..	16·27	1·11846	7·29	8·15
Willesden .. ..	..	..	17·01	1·06979	10·89	11·65
Wood Green .. ..	..	..	16·57	1·09801	9·05	9·93
<i>Rural.</i>						
Hendon .. ..	..	..	16·97	1·07187	8·51	9·12
South Mimms .. ..	..	..	19·31	·94216	12·90	12·15
Staines .. ..	..	..	18·38	·99004	13·24	13·10
Uxbridge .. ..	..	..	18·65	·97576	11·86	11·57
The County .. ..	..	..	17·23	1·05600	10·88	11·48

* Heston and Isleworth. See remarks in text as to death-rate.

⁽¹⁾ Figures for age and sex distribution not available, as this was not a separate district at last census.

INFANTILE MORTALITY.

During 1908 there occurred in the County area a total of 2,655 deaths amongst children who had not yet attained one year of age. This is the lowest actual number during the last eight years, and shows a small decrease in the infant mortality compared with the previous year, the rate per 1,000 births being 95. For comparison the rates in other parts are also given in the following table:—

Infantile Mortality.

Year.	Middlesex.			Lon- don.*	Eng- land and Wales.*	76 Great Towns.*
	Births.	Deaths (corrected) under 1 year.	Rate per 1,000 Births.	Rate per 1,000 Births.	Rate per 1,000 Births.	Rate per 1,000 Births.
1901	22,500	3,006	133	148	151	—
1902	23,766	3,063	129	140	133	—
1903	25,342	2,967	117	130	132	144
1904	26,392	3,602	136	145	145	160
1905	26,501	2,839	107	130	128	140
<i>Average 1901—1905 ..</i>			<i>124</i>	—	—	—
1906	27,035	3,278	121	131	132	145
1907	27,768	2,704	97	116	118	127
1908	27,778	2,655	95	113	121	129

* From Registrar-General's Annual Summary.

The Registrar-General, in his Annual Summary for 1908, writing on the subject of infantile mortality in London, points out that during the 40 years ended 1900 little improvement took place in the rate of death of children

under one year of age, and he gives the following statistics on the matter :—

Infant Mortality, London.

Period.	Rate per 1,000 births.
1861-70	162
1871-80	158
1881-90	152
1891-1900	159

On further analysis of the deaths occurring during the third quarter of the year, it is shown that decrease in infant mortality, and especially in infant deaths from diarrhoeal diseases, corresponds with years of low temperature and high rainfall.

Looking at the rates in the County since 1900, it will be seen that in 1904 and in 1906 the infant mortality was high. In both these years high temperature and deficiency in rainfall was experienced during the third quarter, and on both occasions there was excess in the infant deaths from diarrhoea. The reverse was the case in 1907 and 1908.

Little doubt can be felt as to the influence played by climatic conditions. There is, however, another factor which has come into play during the last few years and which should be mentioned, namely, the increased attention given to the subject by those engaged in public health work as well as others. As a consequence of this, sanitary authorities have largely increased their efforts in various ways to cope with infant mortality, and these efforts must effect good, though it is not possible at present to show the result of their action.

An indication of the increasing attention devoted to the subject of infantile mortality was the passing in 1907 of the Notification of Births Act, which has for its object the notification, to medical officers of health of each birth within 36 hours of its occurrence. Previously, information as to births was chiefly obtained from the registrar of births and deaths, but as a birth need not be registered for 42 days it was frequently found that this information was too belated to be of use to medical officers. With the earlier information now possible useful action can be taken. The Act, however, is a permissive one, and can only be adopted subject to the approval of the Local Government Board.

In the case of Middlesex it has now been adopted in—

Acton	Friern Barnet
Chiswick	Tottenham
Edmonton	Willesden
Finchley	Wood Green

and in these districts women health visitors are engaged in useful work, and work which can only be done by women. In the case of Friern Barnet the services of already existing district visitors are utilized.

Another indication of attempt to limit these deaths is shown by the fact that during the last few years the Local Government Board have required medical officers of health in their annual reports to set out in the form of a table a detailed analysis, showing, at weekly and monthly periods, the causes of death of children under one year, the object of this being to show, as regards any one area, what factors had most marked influence in causing the deaths, and on what lines endeavour can most usefully be made to reduce this influence.

The figures given in these tables in each of the 36 districts in the County have been compiled, and the results are as follows:—

iii. Wasting Diseases.	Premature Birth ..	341	41	40	20	442	22	10	7	1	..	..	..	..	..	..	482
	Congenital Defects ..	69	18	11	4	102	16	13	10	1	4	3	1	2	..	1	154
	Injury at Birth ..	26	4	1	..	31	2	..	..	..	..	..	..	..	..	..	33
	Want of Breast-milk. Starvation	..	1	1	1	3	6	10	2	..	3	3	..	1	..	..	28
iv. Tuberculous Diseases.	Atrophy, Debility, Marasmus..	33	35	19	19	106	36	55	38	24	18	13	13	5	7	9	327
	Tuberculous Meningitis ..	..	..	..	1	1	..	3	1	4	7	4	3	3	6	3	38
	Tuberculous Peritonitis: Tabes Mesenterica ..	..	..	..	..	..	1	3	6	4	3	1	..	2	3	1	25
	Other Tuberculous Diseases ..	..	1	..	1	2	4	2	8	6	4	6	6	3	2	2	47
v. Other Causes.	Erysipelas ..	..	..	2	..	2	3	..	1	..	2	..	..	..	..	..	8
	Syphilis ..	..	..	1	1	2	6	2	1	1	1	1	..	..	..	..	14
	Rickets ..	..	..	..	..	..	..	..	1	..	2	..	..	2	..	1	6
	Meningitis (<i>not Tuberculous</i>) ..	..	1	1	..	2	..	2	4	6	3	3	3	6	3	3	36
	Convulsions ..	25	17	4	1	47	22	13	10	7	2	6	3	6	2	6	129
	Bronchitis ..	5	3	13	10	31	34	18	18	11	14	14	15	13	12	8	200
	Laryngitis ..	1	..	..	..	1	..	1	1	2	..	..	1	..	1	..	7
	Pneumonia ..	3	3	5	6	17	25	19	2	17	11	14	23	22	25	15	229
	Suffocation, overlying	14	3	1	5	23	9	6	7	2	2	..	..	1	..	..	50
	Other Causes ..	47	12	8	7	74	19	19	11	14	16	11	14	14	3	7	207
Total ..		566	145	116	89	916	262	238	214	173	148	124	130	121	113	100	2,630

In the foregoing table it has been unavoidably necessary to include under one heading all the deaths due to diarrhoeal diseases, owing to the fact that in some of the district reports they have not been further classified. The corrected number of deaths from epidemic diarrhoea under one year of age was 358. From this table it will be seen that the largest number of deaths from any one cause was from all forms of diarrhoeal diseases and from premature birth, respectively, the majority of the latter occurring in the first week of life. These subjects have been discussed in previous reports, to which reference may be made.

The cause which ranks next in numbers is atrophy and debility, and this is, probably, in many cases closely allied to diarrhoeal diseases, as the causes which tend to set up the latter have also influence in producing atrophy and debility.

Of the total number of deaths, more than one-third occurred within one month of birth, and about one-fifth under one week of life.

The more important observations in the district reports as to the causes of infantile mortality in the various parts of the county are as follows:—

Acton.—Dr. Thomas points out that in addition to the deaths under one year registered in the district 14 other infants died in public institutions outside, making a total of 188 or a mortality of 120. The rate is lower than in the previous year. He discusses, on the basis of inquiries made during the year, the influence of hand feeding and the employment of married women upon infant mortality, and

COUNTY OF MIDDLESEX, 1908.

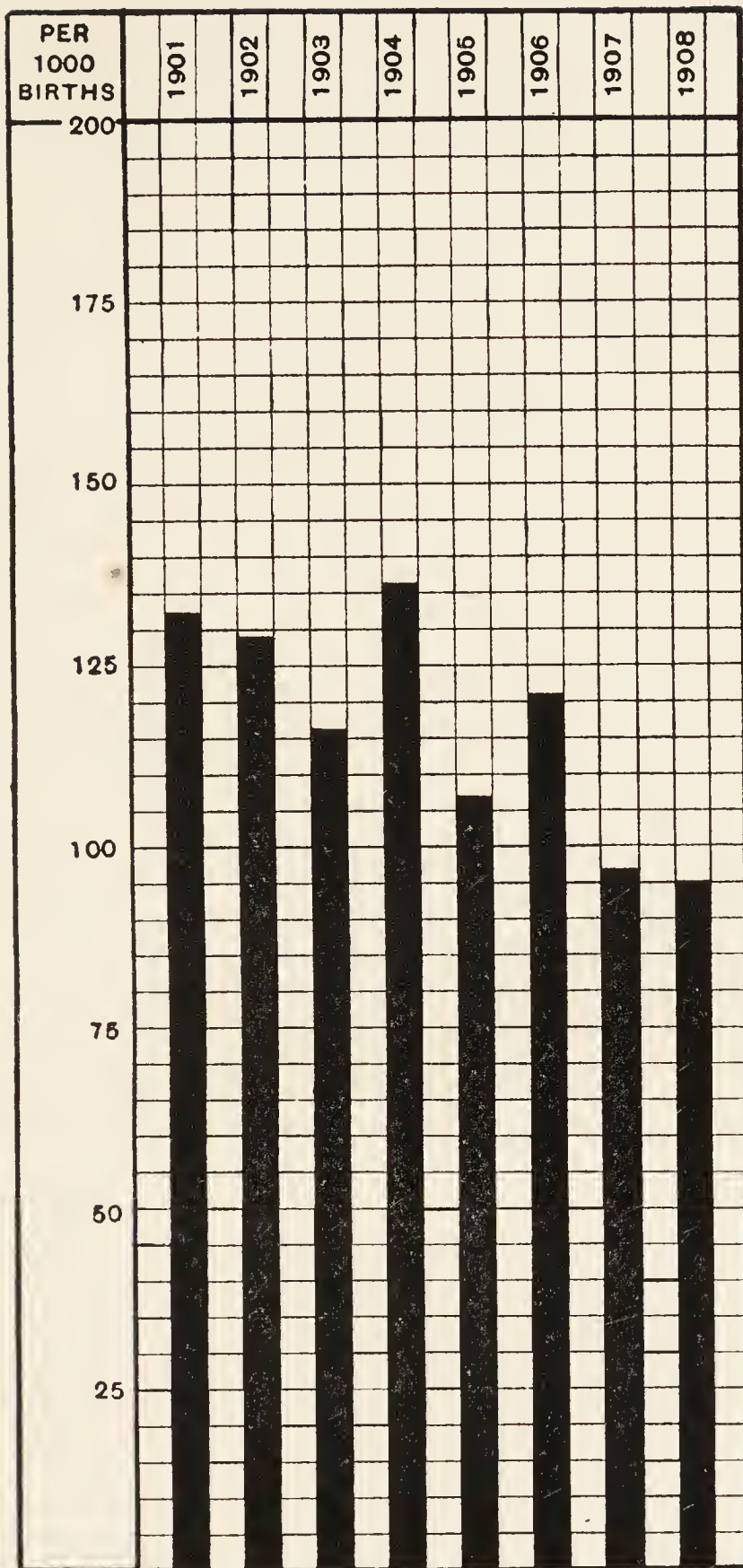


DIAGRAM 4,
SHOWING INFANTILE MORTALITY, OR
PROPORTION OF DEATHS UNDER 1 YEAR PER 1,000 BIRTHS.

as regards the latter, expresses the opinion that "possibly the improved food and greater comfort which their work means more than counteract its disadvantages."

One of the drawbacks attending the employment of married women is that too frequently the infant has to be left in charge of persons quite unfit for the purpose, and often in houses in which the conditions are eminently unsuitable. In Acton a day nursery was opened in January, 1908. This, it is reported, is situated in a part of the district where there are many laundries at which a large number of women are employed, and they are encouraged to visit the children during the day for the purpose of suckling them.

Chiswick.—In this district a female health visitor has been appointed in connection with the administration of the Notification of Births Act. It is reported that her work is well appreciated by the class amongst whom this lies.

Ealing.—In this report Dr. Patten commends the excellent work which is being voluntarily performed in connection with infant mortality by the Ealing Women's Health Association, work which he feels has had influence in bringing about the reduced rate of mortality, namely, 80 per 1,000 births in 1908.

Edmonton.—Dr. Lawrence points out that 14 deaths of infants belonging to the district were registered outside, and that if these be included in the total the infant mortality rate is 117 per 1,000 instead of 108. This shows a decrease on the previous year.

Finchley.—In connection with the adoption of the Notification of Births Act a lady health visitor has been appointed, and she visits all parents of newly-born infants whom the medical man in attendance considers would benefit thereby. Under the Act 635 notifications have been received.

Hampton Wick.—In this district there is a parish nurse who gives advice to mothers as to the feeding and management of infants. This is done under the supervision of a medical practitioner.

Hanwell.—Dr. Hope points out that the rate is 107 per 1,000 births if based on the deaths of children *registered* in the district, but is 117 if “outside” deaths are included. He considers that it is desirable to adopt the Notification of Births Act, and to employ a female health visitor for the purpose of carrying out the duties arising under it, and has reported to this effect to the sanitary authority. Further consideration of the subject was deferred for six months.

Heston and Isleworth.—Dr. Steegmann, in arriving at the rate of 107 deaths per 1,000 births, has taken the deaths, rightly belonging to the district, of children under one year and calculated the rate upon the total number of births registered in the district, which includes children born in the workhouse to mothers who are not really residents of the district. He refers to the valuable work which was carried out in the district during 1907, when a lady health visitor was temporarily employed. Now that it is possible for local authorities, by adopting the Notification of Births

Act, to obtain early information of the occurrence of births, and with proper means, such as a health visitor, to take action with a view to instructing mothers how to rear and manage infants, it is important in districts where this rate of mortality is high to make use of such means. From an analysis of the causes of death of infants, Dr. Steegmann comes to the conclusion that 60 per cent. were due to preventable causes.

Hendon (urban).—Dr. Andrew writes as to the valuable work which could be carried out if a lady health visitor were appointed by the sanitary authority. He also commends the utility of a day nursery which exists in one part of the district, and considers much good would accrue if there were additional ones in other parts of Hendon.

Tottenham.—In connection with the Notification of Births Act, 1,351 visits were made by the female staff and instructions given as to the feeding and management of infants.

Twickenham.—The medical officer of health reports that the question of adopting the Notification of Births Act was considered by the local authority, but it was decided not to take any action in the matter.

Wealdstone —Dr. G. Butler states that at the onset of the hot months of the year leaflets dealing with the subject of summer diarrhoea are distributed from house to house. He suggests that arrangements should be made with the registrar of births and deaths to hand to parents registering a birth a leaflet with directions as to the rearing and management of infants.

Wood Green.—A lady health visitor has been appointed by the authority and she carries out the duties arising under the Notification of Births Act.

Staines (rural).—The infant mortality in this area (136) is one of the highest in the County, and is in excess of that which prevailed in England and Wales or in the 76 great towns. In 1907 the rate was only 97. Out of a total of 82 deaths 13 are recorded as due to prematurity of birth and 11 to diarrhoea.

In the following table the rates in each district are given : —

Infantile Mortality in each District, 1908.

District	Births.	Deaths under one year.	Death-rate per 1,000 Births.	District.	Births.	Deaths under one year.	Death-rate per 1,000 Births.
<i>Urban.</i>				Kingsbury ..	19	1	52
Acton*	..	174	111	Ruislip-Northwood ..	122	8	65
Brentford ..	464	56	120	Southall-Norwood ..	660	63	95
Chiswick*	898	96	106	Southgate ..	659	37	56
Ealing (<i>Borough</i>) ..	1,251	101	80	Staines ..	158	11	69
Edmonton*	2,000	213†	106	Sunbury ..	109	7	64
Enfield ..	1,420	134	94	Teddington ..	442	27	61
Feltham ..	155	20	129	Tottenham*	3,778	361	95
Finchley*	858	54	60	Twickenham ..	751	70	93
Friern Barnet*	333	33	99	Uxbridge ..	228	24	105
Greenford ..	31	3	96	Wealdstone ..	303	27	89
Hampton ..	206	16	77	Wembley ..	234	21	89
Hampton Wick ..	40	6	150	Willesden*	4,095	376	91
Hanwell ..	493	53	107	Wood Green*	1,252	105	81
Harrow ..	346	32	92	<i>Rural.</i>			
Hayes ..	103	8	77	Hendon ..	251	18	71
Hendon ..	787	72	91	South Mimms ..	66	5	75
Heston and Isleworth ..	1,211	130†	107	Staines ..	601	82	136
Hornsey (<i>Borough</i>) ..	1,485	95	63	Uxbridge ..	341	34	99

* In these districts the Notification of Births Act has been adopted.
† EDMONTON.—Not including 14 deaths of infants of Edmonton mothers registered outside the district.
‡ HESTON AND ISLEWORTH.—Not including 17 deaths of infants of non-resident women.

PRINCIPAL EPIDEMIC DISEASES.

The death-rate from the principal epidemic diseases—or what was formerly known as the zymotic death-rate—during 1908 was 1·02 per 1,000 living. This is the lowest rate during recent years, as will be seen from the figures given in the following table.

The diseases from which the death-rate is calculated are—Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (including Typhus, Typhoid and Continued Fever) Epidemic Diarrhoea.

Principal Epidemic Diseases.

Year.	The County.		London.*	England and Wales.*
	Deaths (corrected).	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1901	1,485	1·87	2·25	2·05
1902	1,636	1·96	2·23	1·64
1903	1,307	1·47	1·77	1·46
1904	1,862	2·00	2·18	1·94
1905	1,275	1·31	1·71	1·52
<i>Average, 1901-1905</i>	} 1,513	1·71	—	—
1906	1,825	1·80	1·93	1·73
1907	1,167	1·10	1·42	1·26
1908	1,121	1·02	1·35	1·29

* From Registrar-General's Annual Summaries.

As each of the diseases which is included in this rate is dealt with separately, remarks dealing with the subject will be found in the following pages of the report.

The rates in each of the constituent districts in the County are given in the following table:—

Principal Epidemic Diseases.—Deaths and Death-rates, 1908.

District.	Deaths recorded.	Death-rates per 1,000 living.	District.	Deaths recorded.	Death-rates per 1,000 living.
<i>Urban.</i>			Kingsbury	—	—
Acton ..	73	1·32	Ruislip-Northwood	2	0·35
Brentford ..	10	0·61	Southall-Norwood	17	0·76
Chiswick ..	27	0·74	Southgate..	23	0·71
Ealing (<i>Borough</i>)..	26	0·51	Staines ..	3	0·41
Edmonton ..	120	1·99	Sunbury ..	1	0·21
Enfield ..	73	1·30	Teddington	9	0·49
Feltham ..	14	2·37	Tottenham	144	1·05
Finchley ..	26	0·65	Twickenham	22	0·81
Friern-Barnet	5	0·48	Uxbridge ..	6	0·63
Greenford ..	—	—	Wealdstone	7	0·59
Hampton ..	7	0·73	Wembley ..	3	0·31
Hampton Wick	1	0·37	Willesden	161	1·08
Hanwell ..	20	0·96	Wood Green	32	0·63
Harrow ..	5	0·31	<i>Rural.</i>		
Hayes ..	—	—	Hendon ..	3	0·23
Hendon ..	23	0·72	South Mimms	3	1·04
Heston and Isleworth	74	2·12	Staines ..	25	1·09
Hornsey (<i>Borough</i>)	46	0·50	Uxbridge ..	9	0·66

SMALLPOX.

No cases of this disease occurred during 1908 in the County. The medical officer of health of Tottenham writes that two cases were reported to him. One of these he found was a case of chicken-pox, and the other he states was treated for smallpox in Russia previous to arrival in Tottenham, but at the time when he examined the patient he found he was free from infection.

Smallpox.

Year.	Cases.	Deaths.	Case rate per 1,000 living.	Case mortality per cent.	Death-rate per 10,000 living.
1901	157	18	0·17	13·1	0·22
1902	1,711	283	2·05	16·5	3·39
1903	115	4	0·13	3·4	0·04
1904	59	1	0·06	1·7	0·01
1905	11	—	0·01	—	—
<i>Average 1901-1905</i>			<i>0·46</i>	<i>14·9</i>	<i>0·06</i>
1906	—	—	—	—	—
1907	—	—	—	—	—
1908	—	—	—	—	—

VACCINATION.

The only complete returns as to the conditions of vaccination available are those relating to the *registration* County of Middlesex, which is not coterminous with the *administrative* county, as it does not include parts of Middlesex in the areas of the Kingston and Barnet Unions, and includes parts outside Middlesex in the area of the Edmonton Union.

The figures available are those obtained from the thirty-seventh annual report of the Medical Officer of the Local Government Board, for 1907-8, and refer to the year 1906.

They are as follows : —

Vaccination.—Percentage of Births Registered, 1906.

Unions.	Success- fully vacci- nated. (1)	Exempted by "Conscientious Objection" Certificates. (2)	Not finally accounted for. (3)	Un- vaccinated. (Cols. 2 & 3)
The Registra- tion County	73·0	2·3	15·8	18·1
England and Wales ..	73·4	5·8	11·1	16·1

SCARLET FEVER.

The number of cases notified in the county as a whole was slightly less than in the year 1907, namely 4,208, as compared with 4,335, and the rate per 1,000 persons living is 3·85, which is lower than it has been since 1905.

The number of deaths from the disease was also less, namely 88, which is equivalent to a death-rate per 1,000 of 0·08. It will be seen on examination of the following table that the fatality of the disease also showed during 1908 a slight decrease.

For the purpose of comparison, the figures relating to the adjoining County of London are also given in the table. These have been obtained from the Annual Summary of the Registrar-General, and it will be observed that decrease both in case-rate and death-rate in 1908 is also apparent here.

Scarlet Fever.

Middlesex.						London.*	
Year.	Cases.	Deaths (corrected)	Case rate. Per 1,000 living.	Death-rate. Per 1,000 living.	Case mortality per cent.	Case rate. Per 1,000 living.	Death-rate.
1901	3,461	61	4.37	0.076	1.76	4.06	0.13
1902	3,073	64	3.69	0.076	2.07	3.92	0.12
1903	2,753	59	3.10	0.066	2.14	2.72	0.08
1904	2,827	44	3.03	0.047	1.55	2.90	0.08
1905	2,901	42	2.98	0.043	1.44	4.17	0.12
Average 1901-1905			3.40	0.061	1.79	—	—
1906	4,080	100	4.03	0.098	2.15	4.32	0.11
1907	4,335	97	4.10	0.091	2.23	5.46	0.14
1908	4,298	88	3.85	0.080	2.09	4.53	0.11

* From Annual Summary of Registrar-General.

The incidence of the disease in the County as a whole was less than in the previous year, and on looking at the attack rates of the last eight years it would appear that the highest point in the epidemic wave of scarlet fever was reached in 1907, and that the tendency in 1908 was towards a lessened prevalence of the disease. There is indication in the quarterly rates given below that this decrease may extend over a further period.

Although the prevalence of scarlet fever in the County as a whole was less, this was not the case in all parts of the County, in some of which an increased amount of the disease—in some districts to a marked extent—was present. These comprise Acton and Willesden, which adjoin each other, and Friern Barnet and Southgate, also adjacent to one another. In some other areas the incidence was much the same as in the previous year.

The attack rate during each quarter of the year, based upon the weekly returns of notifications which are sent to the County Council by the district medical officers of health, was as follows:—

Scarlet Fever, case rate per 1,000 living in each quarter.

Quarter.	1907.	1908.
1st Quarter (13 weeks) ..	3·90	3·98
2nd " " ..	3·56	3·47
3rd " " ..	3·54	3·38
4th " " ..	5·52	4·48

The age distribution of the cases and deaths is as follows:—

Scarlet Fever, 1908.

Age group.	Cases.*	Corrected deaths.
0-1	26	1
1-5	972	43
5-15	2,641	35
15-25	352	4
25-65	199	5
65 and up	—	—

* Not including 18 cases in Uxbridge (rural). The medical officer of health has not given the cases in age groups.

More detailed information as to the prevalence of the disease in the various districts will be obtained from the following epitome of the remarks of the district medical officers of health.

Acton.—As regards this district, scarlet fever has been very prevalent during the last two years, and especially so in 1908, the case rate being 8.8 per 1,000, which is much higher than in other parts of the County, except Friern Barnet, where the rate was 8.5. Dr. Thomas discusses the epidemiology of the disease at considerable length, and he illustrates by concrete instances which came under his notice during the year, various features bearing on the natural history of this disease. It is only possible here to refer briefly to the chief points on which he writes.

He shows, from the number of cases occurring each week, the influence which attendance at school has in causing the disease, and he proceeds to demonstrate by

COUNTY OF MIDDLESEX, 1908.

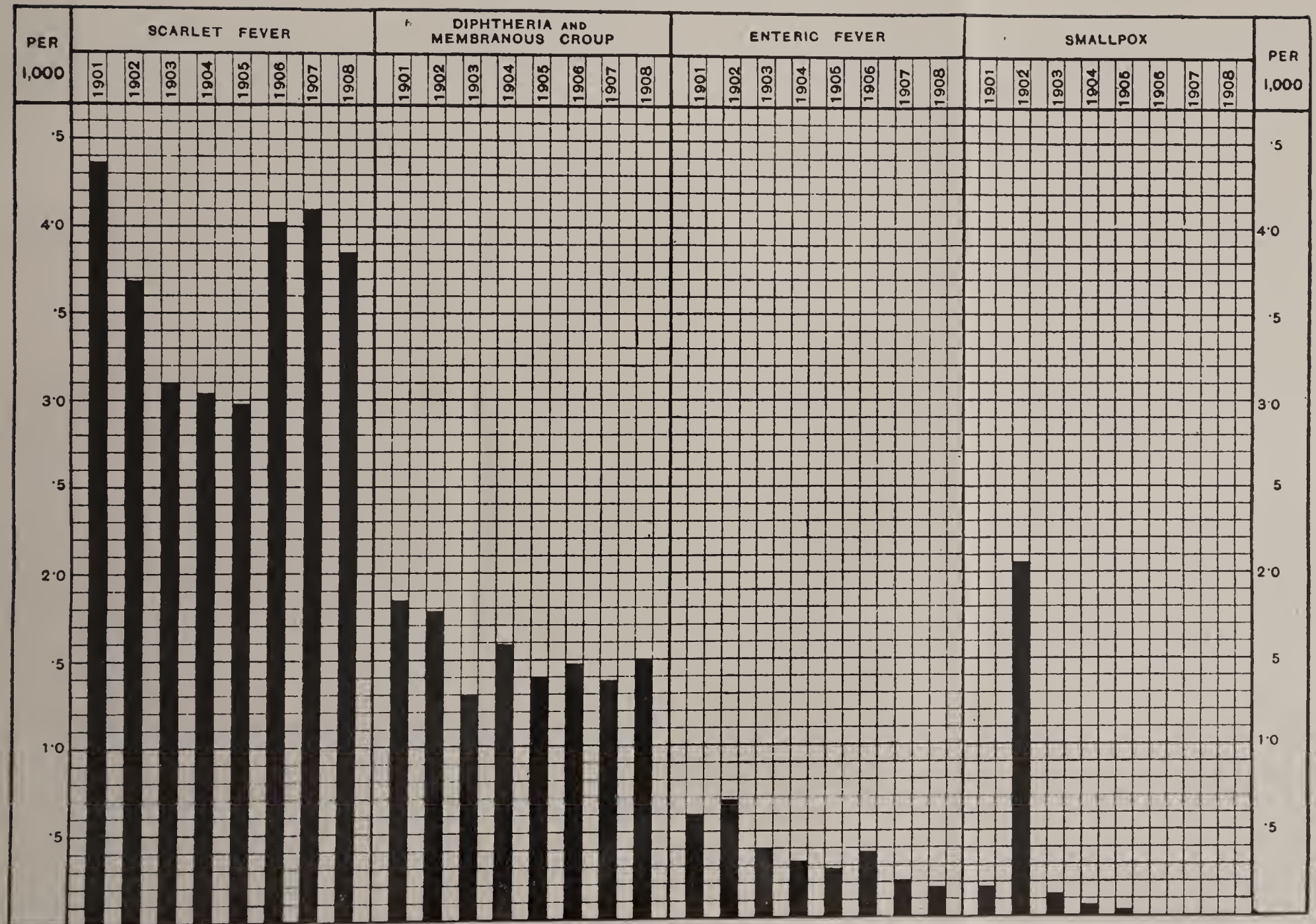


DIAGRAM 5,
SHOWING CASE RATE PER 1,000 PERSONS LIVING OF CERTAIN NOTIFIED DISEASES.

cases which he quotes that the influence of school attendance operates chiefly through the "missed" case, *i.e.*, a case in which the child has suffered from the complaint in so mild a form that scarlet fever has not been suspected by the parents, and it is only at a later stage, often when other cases occur, that the child is found to have signs indicating a recent attack.

A second factor to which he attaches importance as a cause of spread of the disease at schools is the power of infectivity at the early stage of the complaint, that is, between the onset of the disease and the appearance of the rash. Children must often attend school up to the date of the latter occurrence, although they may already have signs of throat affection.

A third factor referred to is the possibility of prolonged infectivity in those who have suffered from scarlet fever.

In addition to this Dr. Thomas deals with the influence of the above factors in the home, and he indicates how (*a*) the fact that a person may be infective before he or she is known to be actually suffering from scarlet fever, and, therefore, before removal to hospital or isolation from the rest of the family, and (*b*) the fact that persons may, after recovery, retain infection in their nasal and other discharges, although apparently in good health, militate against complete success of isolation hospitals.

The importance of avoiding overcrowding in hospital and of the separation of convalescent from acute cases for a short period before their discharge is emphasized by him.

Brentford.—It is stated that the disease did not at any time of the year occur in epidemic form. Comparison with the case rate in 1907 shows that the complaint was much less prevalent.

Chiswick and Ealing.—In both these districts there was lessened prevalence of scarlet fever. The rates will be found in the table at the end of this section.

Edmonton.—Scarlet fever was more prevalent than in 1907. Dr. Lawrence in previous reports has referred to "return" cases, and again this year gives a list of cases which he regards as coming in this category. He was instructed during the year to examine, at the Town Hall, scarlet fever patients on their discharge from the hospital of the Edmonton and Enfield Joint Hospital Board. Twenty-five out of eighty-two patients discharged were so examined.

In *Enfield* scarlet fever was much less prevalent.

Friern Barnet.—Very prevalent. Dr. Spreat reports that increase in the disease commenced at the end of 1907, and that this continued up to April in 1908. In September, he states, a small localised outbreak of eleven cases was caused by a "missed" case. This was a boy who was excluded from school owing to his dirty condition, and was later found to be desquamating whilst mixing with the rest of the community.

Hanwell.—Here the incidence of the disease was low in the district generally, but a number of cases—spread over a period of many weeks—occurred in an institution for children, namely the Central London District Schools.

Hendon (urban).—There was increased prevalence in the district, and the influence of “missed” cases in causing spread of the complaint is referred to by Dr. Andrew.

Heston and Isleworth.—A considerable number of cases occurred in Gordon House School, and were removed to the hospitals of the Metropolitan Asylums Board.

Southall-Norwood.—Dr. Windle refers specially to a small localised outbreak as showing the influence of aggregation in school. “The circumstances of this outbreak were investigated by Dr. Young and myself, and in the course of investigation we made an examination of the scholars in the class-rooms in which these children attended. During the examination we found a marked recent case of scarlet fever in school, and two other children who had had scarlet fever some two or three months previously were suffering from discharge from the nose and ears ; one other case had suspicious desquamation. On visiting the house of some of the absentees from school, I discovered a case of scarlet fever being kept at home without any medical treatment, and all the other children in the house continuing to attend school.” After the action taken, as the result of this investigation, the spread of the disease decreased. Dr. Windle concludes that the greatest obstacles to preventing spread of the disease are the ignorance and carelessness of some parents in sending their children to school in an infectious condition, and points out that at present this can only be met by much more frequent inspection of all the children in school.

There was no reason to suspect milk as a source of infection during the year.

Staines (urban).—No cases were notified.

Tottenham.—Dr. Butler Hogan deals with the question of the part played by schools in aiding the spread of scarlet fever. He records the experience in Tottenham during recent years, and especially enters into the facts collected on the following points:—

- (a) The day in the week upon which cases mostly have their onset; and
- (b) The number of cases notified at equal periods just before school holidays, during school holidays, and after school holidays.

As regards the former he states that while the figures in Tottenham are not sufficiently large upon which to base a conclusion, they agree in effect with the results which have been pointed out in Manchester.

Wealdstone.—In this district there was increase in the prevalence of the disease, but at no time did it assume an epidemic form. Dr. Butler indicates, from his experience during the year, the value of early notification and prompt isolation, by removal to hospital, in preventing spread of infection from first cases.

No evidence of infected milk being the cause of the disease was found in any case.

Willesden.—Dr. W. Butler reports the largest number of cases of scarlet fever which has occurred in the district in any one year. The case rate is also the highest during the last four years. This is not due to any outburst such

as is at times caused by the action of a single agency such as infected milk, and it is not possible with our present knowledge to indicate the exact causes. Probably several factors have influence in the matter.

Staines (rural).—In the case of this district Dr. Morris reports that out of 84 cases 68 occurred in the parish of Bedfont, and 30 of these in an institution situated in this parish.

Uxbridge (rural).—The cases here it appears occurred almost entirely in the parish of Harefield. Dr. Charpentier states he failed to trace the cause of these cases. Compared with 1907 and 1906, the attack rate of scarlet fever in the whole district, however, showed a marked decrease.

In the following table the case-rates and death-rates in each area are set out.

Scarlet Fever, 1908. Age Distribution of Cases and Deaths, together with Case and Death Rates.

	Case rate per 1,000 living.	CASES NOTIFIED.						DEATHS RECORDED.						Death-rate per 1,000 living.		
		All ages.	Under 1 year.	1-5.	5-15.	15-25.	25-65.	65 and up.	Under 1 year.	1-5.	5-15.	15-25.	25-65.		65 and up.	All ages.
<i>Urban.</i>																
Acton ..	8.800	484	—	111	317	39	17	—	—	9	4	1	1	—	15	0.272
Brentford ..	2.595	42	—	10	26	3	3	—	—	—	—	—	—	—	—	—
Chiswick ..	2.448	89	—	21	55	11	2	—	—	—	—	—	—	—	—	—
Ealing (<i>Borough</i>) ..	2.118	108	—	28	57	15	8	—	—	1	—	—	—	—	1	0.019
Edmonton ..	5.118	308	4	83	190	18	13	—	—	3	8	—	1	—	12	0.199
Enfield ..	3.598	202	—	43	134	18	7	—	—	2	3	—	—	—	5	0.089
Feltham ..	0.677	4	—	1	—	3	—	—	—	—	—	—	—	—	—	—
Finchley ..	3.621	143	—	28	89	15	11	—	—	2	1	1	1	—	4	0.101
Friern Barnet ..	8.540	89	2	31	46	2	8	—	—	1	—	—	—	—	2	0.192
Greenford ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hampton ..	1.473	14	—	4	7	2	1	—	—	—	—	—	—	—	—	—
Hampton Wick ..	1.126	3	—	—	3	—	—	—	—	—	—	—	—	—	—	—
Hanwell ..	3.725	77	—	17	54	2	4	—	—	2	—	—	—	—	2	0.096
Harrow ..	3.039	49	—	10	35	3	1	—	—	—	—	—	—	—	—	—
Hayes ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hendon ..	3.495	111	—	18	85	7	1	—	—	—	1	—	—	—	1	0.031
Heston & Isleworth ..	2.810	98	—	19	63	9	7	—	—	—	—	—	—	—	—	—
Hornsey (<i>Borough</i>)	2.631	239	3	43	156	21	16	—	—	2	1	—	—	—	3	0.033

[illegible]

* Ages not given.

DIPHTHERIA (INCLUDING MEMBRANOUS CROUP).

During 1908 the total number of notifications from this complaint was 1,641 as compared with 1,469 in 1907. This is the largest number of cases during the last eight years, and the attack rate per 1,000 persons living is higher than in each of these years except 1901, 1902 and 1904.

The number of deaths, after correction for those of residents occurring outside the County area, was 152, which is equivalent to a death-rate of 0·139.

The corresponding death-rate for England and Wales during 1908 was 0·15 ; for the 76 great towns 0·16 ; and for the 142 smaller towns 0·16 per 1,000 living respectively.

The fatality of the disease in the County does not show an increase.

In the following table the figures and rates are given together with the rates of the adjoining County of London :—

Diphtheria and Membranous Croup.

Middlesex.						London.*	
Year.	Cases.	Corrected deaths.	Death-rate		Case mortality per cent.	Case rate.	Death-rate.
			Case rate	Per 1,000 living.			
1901	1,462	181	1·84	0·228	12·3	2·68	0·29
1902	1,495	218	1·79	0·261	14·5	2·31	0·25
1903	1,145	132	1·29	0·148	11·5	1·68	0·16
1904	1,480	139	1·59	0·149	9·3	1·56	0·16
1905	1,361	134	1·40	0·138	9·8	1·39	0·12
Average 1901-1905			1·57	0·182	11·6	—	—
1906	1,498	141	1·48	0·139	9·3	1·71	0·15
1907	1,469	154	1·38	0·145	10·4	1·85	0·16
1908	1,641	152	1·50	0·139	9·2	1·64	0·15

* From Annual Summary of Registrar-General.

A study of the table at the end of this section shows that the disease was most prevalent in the district of Enfield, and that the incidence here was much in excess of that in any other populous parts of the county. It was also present in excess in South Mimms, but this district has only a small population (2,867), and it is not possible therefore to attach to a high rate in any one year the same importance as when the rate is based on larger numbers. It should be pointed out that the district of South Mimms is in the same part of the county as Enfield. The only other districts showing a rate higher than that of the county as a whole are Edmonton which adjoins Enfield, Friern Barnet, Staines (rural) and Brentford, whilst Southgate has a rate equal to that of the county.

Practically it may be said that the disease was unusually prevalent in the north-eastern part of the county, and in the case of Enfield this was due to a marked epidemic outbreak, which will be further referred to later on.

In the previous year the districts in which excess was chiefly noticeable were Brentford, Ealing, Heston and Isleworth and Staines (rural) in the central and south-western part of the county.

The period of the year in which the incidence of the disease was most marked will be gathered from the following quarterly rates calculated upon the number of notifications returned week by week by local medical officers of health to the County Council:—

*Diphtheria (including Membranous Croup) notifications,
Rate per 1,000 living.*

Quarter.	1907.	1908.
1st Quarter (13 weeks) ..	1·79	1·40
2nd „ „ ..	1·22	1·14
3rd „ „ ..	1·21	1·07
4th „ „ ..	1·41	2·36

No cases were notified in Greenford, Hayes, Kingsbury or Wembley, whilst only one case occurred in Ruislip-Northwood, three in Hampton Wick and Sunbury respectively, four each in Uxbridge (urban) and Wealdstone, and five each in Staines (urban) and Uxbridge (rural).

The age distribution of the cases and of the deaths (corrected) at various age groups are given in the following table:—

Diphtheria (including Membranous Croup), 1908.

Age group.	Cases.*	Corrected deaths.
0-1	21	5
1-5	471	87
5-15	903	53
15-25	136	3
25-65	105	4
65 and up	—	—

* Not including 5 cases in Uxbridge (rural), the ages of which are not given.

In the following account further details are given as to diphtheria in the various districts, based chiefly upon the reports of the district medical officers, and in part upon such information as I obtained by notification from school teachers and by inquiry at the schools in the area, which for purposes of elementary education is under the County Council.

Acton.—In this district there was no increase in the prevalence of diphtheria. Dr. Thomas states that at no period did the disease take on the form of an outbreak, and he quotes several instances where, upon the occurrence of a few cases amongst children attending the same school,

bacteriological examination of material from the throats of children who had been in contact with a case displaying unmistakable clinical symptoms, revealed the presence of the diphtheria bacillus. Isolation of these cases was followed by cessation of the disease.

Chiswick.—There was no marked prevalence of diphtheria.

Edmonton.—Here an increase in the disease occurred, namely, an attack rate of 2·26 per 1,000 living, as compared with 1·59 per 1,000 in 1907. It does not appear that any localised outbreak occurred.

Enfield.—This district was badly affected by diphtheria during the latter part of the year. The epidemic formed the subject of a special report by Dr. Warren, the newly-appointed medical officer of health, who only took up his duties about the time when the disease commenced to increase in the area. At a later stage the sanitary condition and administration of the district and the circumstances of the outbreak were investigated by a medical inspector of the Local Government Board, and these matters will doubtless form the subject of report by him.

From Dr. Warren's report the circumstances of this outbreak are briefly as follows:—From the commencement of the year cases from one to eight in number were notified nearly every week up to the end of August. In the second week in September the number increased to 12 cases, and this was followed in each week by further increases, until the third week in October, when 36 cases were notified. From this time on to the end of the year

COUNTY OF MIDDLESEX, 1908.

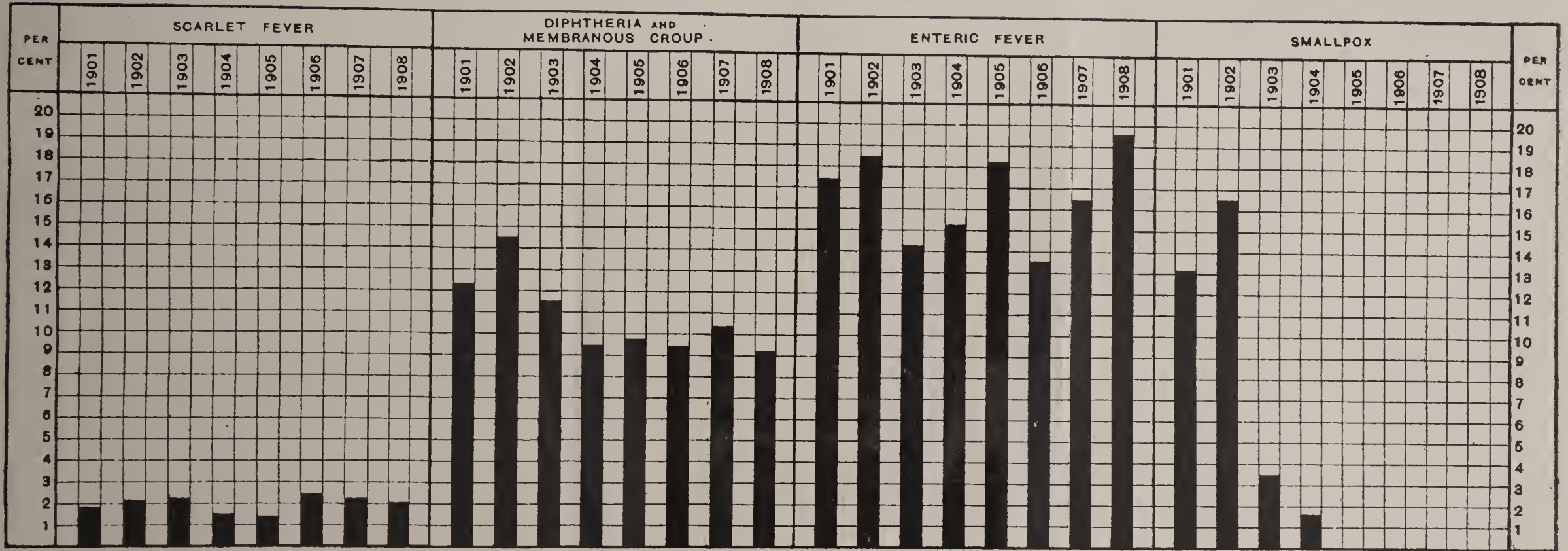


DIAGRAM 6,
SHOWING MORTALITY PER CENT. OF CASES NOTIFIED.

the tendency was to slow decrease, with a secondary rise towards the end of November. Excess of cases, however, was still obvious at the end of the year. Between the end of July and the end of December 298 cases were notified.

The greater number of cases is said to have occurred within a small area in the Chase Ward and the immediately adjoining parts of Town Ward, but about the same period in another and quite distinct part of the district on the eastern side, namely, at Enfield Lock, an outbreak smaller in amount was also taking place. Dr. Warren states that he was not able to trace any connection between these two outbreaks.

In his special report, Dr. Warren deals with the question whether milk had part in causing the epidemic, but comes to the conclusion, as the result of his inquiries, that the outbreak was not due to this article of food.

He states that in many of the houses in which cases occurred insanitary conditions which would predispose to the disease were found. It also appears that attendance at school played part in the spread of infection, and it was found necessary to close several of the public elementary schools in the affected area. In addition to these, he mentions as other influencing causes the time of year and meteorological conditions.

Hendon (urban).—In this district there was slight prevalence during the first quarter of the year. Dr. Andrew narrates the circumstances of a small outbreak amongst fourteen children who attended a party. One of these at the time was suffering from unrecognized diphtheria: five of the children afterwards developed the complaint and one died.

Heston and Isleworth.—In this district Dr. Steegmann is able to report a decrease in the prevalence of diphtheria.

Southall-Norwood.—A decreased incidence compared with 1907. In one case Dr. Windle states suspicion arose of infection having been contracted from a cat which just previously had been destroyed for sore throat and lumps in its neck. In several cases there was evidence that infection had been contracted outside the district.

Southgate.—During the latter part of the year a number of cases occurred in the area known as New Southgate, which is situated partly in Southgate and partly in Friern Barnet. The incidence was mostly amongst children attending the infant department of a public elementary school, and accordingly all the children here were on several occasions examined by Dr. Ransome and myself, and all those found with any suspicious signs were examined bacteriologically. On the first examination two children were as a result found to have the diphtheria bacillus present in their throats or noses, and they were excluded until declared free. The effect of this was a decrease in the cases amongst the children.

Sunbury.—Only three cases were notified.

Tottenham.—The medical officer states that increasing use is made of the opportunities offered by the sanitary authority of verification bacteriologically of doubtful cases, and this, he thinks, has materially assisted in preventing the spread of the disease.

Willesden.—Dr. Butler writes:—"The behaviour of diphtheria during the last 20 years in Willesden is interesting. The mean incidence of the disease during the

first quinquennium was 1·74 per 1,000, during the second quinquennium it rose to 2·4 per 1,000, during the third to 3·0, while for the five years ended 1907 it dropped to 1·96 per 1,000. During 1908 it has fallen below the mean of the first quinquennium, namely to 1·4 per 1,000. The precise relationship between the exhalations of sewage and diphtheria is difficult to determine. I have been disposed myself to associate the incidence of the disease with the emanations arising from a defective system of drainage, and to seek an explanation of the distribution of diphtheria in Willesden in the local variations of types of drainage, and the varying prevalence of their incidental defects."

He gives a chart showing the distribution of some of these defects of drainage, with a view to its comparison with charts published in previous reports showing the local incidence of diphtheria and scarlet fever.

South Mimms.—The increased incidence here was due to cases occurring in Potters Bar. Dr. Gruggen points out to his authority the advantage of providing means of free bacteriological examination of suspicious cases of throat disease, and of supplying a "free supply of antitoxic serum for prophylactic use."

Staines (rural).—In this district the incidence of diphtheria was less than in 1907. The greater number of cases occurred in Bedfont parish, and necessitated the closure of the infant school, and careful examination of the children on the reassembling of the school by Dr. Morris and myself.

In the following table are given the case rates and death-rates in each sanitary area.

ENTERIC FEVER.

In the next table are given the number of cases of enteric fever notified in the county during the last eight years, and the corrected number of deaths of Middlesex residents.

The cases notified in 1908 were 199, which is equivalent to an attack rate of 0·18 per 1,000 persons living, and the corrected number of deaths was 39, or a death rate per 1,000 of 0·035.

. In the adjoining county of London the case rate was 0·28 and the death rate 0·05.

In England and Wales the death rate in 1908 was 0·07, in the 76 great towns 0·08, and in the 142 smaller towns 0·08 per 1,000 living.

Middlesex.						London.*	
Year.	Cases.	Deaths corrected.	Case rate.	Death-rate.	Case mortality per cent.	Case rate.	Death-rate.
			Per 1,000 persons living.			Per 1,000 persons living.	
1901	482	86	0·60	0·108	17·3	0·70	0·11
1902	575	106	0·69	0·127	18·4	0·73	0·12
1903	356	51	0·40	0·057	14·2	0·51	0·08
1904	302	46	0·32	0·050	15·2	0·41	0·06
1905	281	51	0·28	0·052	18·1	0·33	0·05
Average, 1901-1905			0·45	0·077	17·0	—	—
1906	386	52	0·38	0·051	13·5	0·34	0·06
1907	228	38	0·21	0·035	16·6	0·29	0·04
1908	199	39	0·18	0·035	19·6	0·28	0·05

* From the Annua Summary of the Registrar-General.

On examination of the foregoing table it is seen that the number of cases and the case rate of enteric or typhoid fever has steadily decreased since 1900, except in the year 1906, when there was an increase, which was due to a localised epidemic in one part of the county.

During 1908, except in Finchley, there was no special incidence of the disease nor any epidemic outbreak in any part of the county.

The districts in which the attack rate was in excess of that for the whole area of the county are Acton, Edmonton, Finchley, Uxbridge (urban), Willesden and Hendon (rural).

In the following districts no cases occurred, viz., Feltham, Friern Barnet, Greenford, Hampton Wick, Hanwell, Hayes, Kingsbury, Ruislip, Northwood, Southgate, Sunbury, Teddington, Wembley and South Mimms.

In regard to the probable source of infection of cases in five instances, it is stated that the cause was contaminated shell fish.

The notification rates in each quarter of the last two years are as follows:—

Enteric Fever, Notification rate per 1000.

Period.	1907.	1908.
1st Quarter (13 weeks) ..	0·14	0·15
2nd " "	0·14	0·08
3rd " "	0·26	0·18
4th " "	0·30	0·30

The age distribution of the cases and deaths (corrected) are shown in the following table:—

Enteric Fever, 1908.

Age group.	Cases.*	Corrected deaths.
0—	—	—
1—	9	—
5—	57	8
15—	41	8
25—	89	22
65 and upwards.	1	1

* Not including cases in Uxbridge (rural).

Dealing now with each district separately the particulars of the cases are as follows:—

Acton.—The medical officer of health writes that most of the patients contracted the infection outside the county. Two were infected in Kent, and 1 of these directly or indirectly infected 5 other people in Acton. One of the latter was the husband of the first patient. On the removal of husband and wife to hospital, their child—a baby—was taken to the house of the woman who had nursed the

patients previous to going to hospital. Four cases afterwards occurred in the house in which this woman lived.

Another case probably contracted the disease at Margate.

In 2 other cases the evidence pointed to infection from contaminated shell fish.

Brentford.—Only 2 cases occurred. This is the smallest number since 1902.

Chiswick.—One case was thought to be due to eating contaminated shell fish.

Ealing.—Dr. Patten reports that in one of the 5 cases the infection was contracted outside Ealing.

Edmonton.—In this district the attack rate has for several years been relatively high as compared with the other parts of the county. It does not appear from the report of the medical officer that there was reason to suspect spread of infection from one patient to another. The 36 cases occurred in 30 houses. Contaminated shell fish, fried fish and water cress are suspected of having played part in the infection of some of the cases.

Finchley.—In this district unusual incidence of the disease occurred due to a small localised outbreak which formed the subject of a concise special report by Dr. Prior, the medical officer of health. The facts may be thus briefly epitomised.

The outbreak occurred in a small area on the eastern border of the district, containing 25 separate dwellings. These were occupied by 30 families consisting of 159 persons, of which 89 were adults and 70 were children. The cases occurred at three periods, separated by short intervals of time, between August 6th, when the first case was notified, and the middle of November. A total of 14 cases occurred and 8 houses in the area were affected, 3 cases each in 2 houses, 2 cases each in 2 houses, and 1 case each in the remaining 4 houses.

Dr. Prior is of opinion that there were two distinct sources of infection. In the first outbreak three cases and probably a fourth were all infected about the same time, but what the source of infection was it was not possible to determine. The fourth case referred to above, although ill, was not known to be suffering from typhoid until after he had left the district to recuperate. The inquiries made in connection with the other cases led to further inquiry being made about the illness of this patient, and as a result of a bacteriological examination it appears that he must have been ill in Finchley, with the disease in an irregular and atypical form.

This case appears to have been the source of infection of the second batch of cases. The remaining cases are difficult to explain.

Dr. Prior concludes by making some recommendations for the improvement of the roads in which the cases occurred, and advises the closing in of a ditch in their vicinity.

Southall.—One case was notified. This, Dr. Windle states, was a child who became ill on returning from London, where it had been staying with a relative who was suffering from typhoid fever.

Tottenham.—The medical officer of health states that in only one case did suspicion arise that contaminated shell fish was the cause of infection. In the majority of cases he considers there were opportunities of direct infection.

Uxbridge (urban).—No information is given as to the possible source of infection of the three cases notified.

Wealdstone.—As regards the one case notified in this district, Dr. Butler states the disease was contracted by the patient while travelling abroad.

Willesden.—Dr. Wm. Butler narrates the circumstances of one case which occurred in a gipsy caravan. This van had been in the district on a vacant plot of land, near which is an open ditch, for a week before the case was notified, and during this time the stools of the patient were emptied into the ditch, which had to be cleansed and disinfected at considerable expense. Fortunately no spread of infection is known to have taken place.

Dr. Butler reviews the histories which have been obtained as to probable source of infection of cases in the last five years, and gives the following figures as to those in which the evidence points to contaminated shell fish as the cause.

Of a total of 180 cases the probable cause was the consumption of oysters in 14, cockles in 4, winkles in 11, mussels in 6, other shell fish or mixed in 8 instances respectively.

The attack rates and death rates from enteric fever in each district during 1908 are shown in the following :—

[illegible]

RURAL.

Hendon	..	0.232
South Mimms	..	—
Staines	..	0.087
Uxbridge	..	0.147

PUERPERAL FEVER.

The number of cases notified as suffering from this disease shows a slight decrease on the previous year, and there is a decrease of 0·3 in the rate based on the number of registered births.

For each of the last eight years the cases and deaths (corrected) have been as follows :—

Puerperal Fever.

Year.	Cases notified.	Deaths (corrected).	Case-rate per 1,000 Births registered.
1901	35	35	1·5
1902	42	38	1·7
1903	48	37	1·9
1904	56	46	2·1
1905	53	45	2·0
<i>Average 1901-5</i>			1·8
1906	56	38	2·0
1907	53	41	1·9
1908	46	34	1·6

Of the cases of puerperal fever twelve occurred in women attended in their confinements by certified midwives, one was attended by an uncertified midwife, two by friends who were called in at the last moment, and one patient who contracted the complaint is said not to have had anyone in attendance on her. Further details as to the cases attended by midwives will be found in the section of the report dealing with the Midwives Act. On receipt of the weekly return of infectious diseases made to the County Council by the district medical officers of health, inquiry is at once made into each case of puerperal fever notified, with a view to seeing whether a midwife is concerned in the case or not, and if so, necessary action is taken to avoid the spread of infection.

The number of cases notified in each district is as follows:—

Puerperal Fever, 1908.

District.	Births.	Puerperal Fever. (Cases notified)
<i>Urban.</i>		
Acton	1,568	1
Brentford	464	1
Chiswick	898	—
Ealing (<i>Borough</i>)	1,251	2
Edmonton	2,000	2
Enfield	1,420	3
Feltham	155	1
Finchley	888	2
Friern Barret	333	1
Greenford.. .. .	31	—
Hampton	206	—
Hampton Wick	40	—
Hanwell	493	—
Harrow	346	—
Hayes	103	—
Hendon	787	2
Heston and Isleworth	1,211	3
Hornsey (<i>Borough</i>)	1,485	3
Kingsbury	19	—
Ruislip-Northwood	122	—
Southall-Norwood	660	1
Southgate.. .. .	659	1
Staines	158	—
Sunbury	109	—
Teddington	442	1
Tottenham	3,778	5
Twickenham	751	—
Uxbridge	228	—
Wealdstone	303	—
Wembley	234	—
Willesden	4,095	7
Wood Green	1,282	2
<i>Rural.</i>		
Hendon	251	1
South Mimms	66	—
Staines	601	7
Uxbridge	341	—

TYPHUS, RELAPSING FEVER, CHOLERA.

No cases were notified. The occurrence of cholera to a considerable extent in Russia at the end of the summer raised suspicion that the disease might be introduced into this country by ships coming to the Port of London and thus into other parts of the metropolis. This, however, did not occur.

ERYSIPELAS.

The number of notifications of this complaint during recent years has been as follows:—

Erysipelas.

Year.	Cases.	Deaths corrected.
1901	641	27
1902	691	36
1903	591	28
1904	661	42
1905	655	31
1906	793	25
1907	644	18
1908	641	22

The cases in each district were as follows :—

Erysipelas, 1908.

District.							Cases notified.
<i>Urban.</i>							
Acton..	..	..	..	..	..	..	35
Brentford	..	..	..	..	..	..	18
Chiswick	..	..	..	..	..	..	38
Ealing (<i>Borough</i>)	..	..	..	..	..	..	36
Edmonton	..	..	..	..	..	..	73
Enfield	..	..	..	..	..	..	36
Feltham	..	..	..	..	..	..	6
Finchley	..	..	..	..	..	..	17
Friern Barnet	..	..	..	..	..	..	13
Greenford	..	..	..	..	..	..	—
Hampton	..	..	..	..	..	..	3
Hampton Wick	..	..	..	..	..	..	—
Hanwell	..	..	..	..	..	..	16
Harrow	..	..	..	..	..	..	5
Hayes .	..	..	..	..	..	..	4
Hendon	..	..	..	..	..	..	10
Heston & Isleworth..	..	..	..	..	..	..	15
Hornsey (<i>Borough</i>)	..	..	..	..	..	..	39
Kingsbury	..	..	..	..	..	..	—
Ruislip-Northwood..	..	..	..	..	..	..	—
Southall-Norwood	..	..	..	..	..	..	28
Southgate	..	..	..	..	..	..	14
Staines	..	..	..	..	..	..	—
Sunbury	..	..	..	..	..	..	—
Teddington	..	..	..	..	..	..	5
Tottenham	..	..	..	..	..	..	64
Twickenham	..	..	..	..	..	..	11
Uxbridge	..	..	..	..	..	..	6
Wealdstone	..	..	..	..	..	..	14
Wembley	..	..	..	..	..	..	—
Willesden	..	..	..	..	..	..	78
Wood Green..	..	..	..	..	..	..	30
<i>Rural.</i>							
Hendon	..	..	..	..	..	..	1
South Mimms	..	..	..	..	..	..	4
Staines	..	..	..	..	..	..	15
Uxbridge	..	..	..	..	..	..	7

MEASLES.

In the following table are given the corrected number of deaths and the death rates per 1,000 persons living since 1900. During 1908 the deaths amounted to 222 or a death rate of 0·20, one of the lowest in the period mentioned:—

Measles.

Year.	Corrected deaths.	Death-rate per 1,000 persons.
1901	174	0·21
1902	275	0·33
1903	249	0·28
1904	331	0·35
1905	176	0·18
<i>Average 1901-1905</i>		<i>0·27</i>
1906	247	0·24
1907	258	0·24
1908	222	0·20

In the reports relating to nineteen of the districts no mention is made as to the prevalence or otherwise of the disease during the year, and it is to be assumed that it was not present to a noteworthy extent; in six reports it is stated either that few cases occurred or that the complaint was practically absent; whilst in the remaining eleven districts a large number of cases occurred, and generally in an epidemic form, at one or other period of the year.

Measles is a disease the effective control of which offers very great difficulties. This is primarily due to the fact that the complaint is highly infectious early in the illness and before the development of the characteristic rash which appears at the end of the third day or on the fourth day after onset. During this period the patient usually suffers from certain symptoms which are somewhat similar to those of an ordinary cold, and for which they are liable to be mistaken, until the development of a rash shows the true nature of the disease. In the absence of other cases such mistake is very liable to occur, and, indeed, even when the complaint is prevalent in an area the early symptoms are often not thought by parents sufficiently important to need the attention of a doctor. Under the above circumstances, the introduction of a case suffering from these early symptoms amongst children in schools is almost impossible of prevention, with the result that other children become infected before anything can be done. The usual experience is that if a child has ceased to attend school owing to measles, this has not taken place until the rash has developed, in other words, the child has been two or three days in close contact with others during a highly infective period; the consequence is that already before any information is available as to the presence of the disease a varying number of children have contracted it, and these fall ill at a period varying from the eighth or ninth to the thirteenth day after the first case. If steps can be taken to close a department or a school class during a short time, sufficient to include the above mentioned days, this batch of cases will sicken and fall ill during the closure, and not whilst mixing with other children in school, and the spread of infection in school would, as a result, be much lessened. Ability to take action on these lines is, in practice,

usually out of the question owing to the fact that information as to the first case is only available in exceptional instances. Commonly the first information of the occurrence of measles is only received when the first crop of cases takes place, and often even later than this. The question has been closely studied by Dr. C. J. Thomas in London schools over an extended period, and the conclusion arrived at is to the effect that closure of schools as usually practised is useless, and, further, "that closure applied in the only successful manner merely postpones measles for such a short time that the interference with school work, except under special conditions, is hardly justified." In connection with the work of medical inspection of school children under the Education (Administrative Provisions) Act, 1907, attempt to deal with the matter is made in the area under the County Council by getting the head teachers to notify cases of infectious disease amongst scholars. As soon as a notification is received of the occurrence of measles a visit is made by one of the medical inspectors or myself to the school, and all the children are carefully examined with a view to the exclusion of those regarded as suspicious or likely to have contracted the complaint owing to the fact that they have not previously suffered from it. In all such cases where it is possible to do so, the medical officer of health of the district is communicated with, and, if he is able, he also visits the school at the time and confers with us as to the special circumstances and the course which should be taken.

The references made in the district reports on the subject of measles are as follows :—

Acton.—From the report of Dr. Thomas it appears the complaint was epidemic during the first half of the year,

and several schools were closed. At the end of the year, just before the Christmas holidays, measles was again introduced into the district. The child affected was a scholar at a public elementary school, and it was anticipated that the first crop of cases would occur between December 18th-23rd. As these dates were the last days of the term, it was decided to close the department on the 18th. Subsequent inquiries showed that five other cases occurred during the period of closure, but apparently no further extension occurred. Dr. Thomas points out in reference to the result that as regards one of the classes concerned in the closure about 90 per cent. of the children were protected by previous attacks, and under ordinary circumstances would not have been affected, but the other classes were not so well protected, and extension of measles would in all probability have occurred had the five cases of the first crop fallen ill whilst still attending school. The circumstances in this instance were peculiarly favourable for closure, in that owing to the proximity of the holidays it meant no greater interference with schoolwork than the loss of a few days, and Dr. Thomas writes as regards this :—

“There is one difficulty under present conditions which always confronts us. When a case occurs in a class, the only practicable method is to close that class for a fortnight, and to keep all the children under observation during the incubation period. Unfortunately, the closure of a single class is more serious financially than the closure of the whole department, and the occurrence of a single case does not justify the latter course.”

A review of the prevalence of measles in Acton during the last twenty-six years is given, and the reasons which bring

about failure in obtaining early and complete information when the disease is made compulsorily notifiable are set out. The opinion is expressed that "success is more probable along other paths, more especially in a development of school notification," and the following up of all cases notified, by visits to the houses by women health visitors.

Feltham.—In this district an extensive outbreak occurred in the autumn. Information as to its occurrence was not received until the disease had already affected a large number of children in the public elementary school. Measles has not been prevalent in the neighbourhood for a considerable time, and consequently there was a large number of susceptible children.

The school was closed by the medical officer of health.

Finchley.—The disease was very prevalent in the autumn, and several infant departments were closed.

Tottenham.—The complaint was prevalent in the last quarter of the year.

Wealdstone.—Dr. Butler reports that a considerable outbreak of measles occurred in the autumn, but no deaths resulted.

Willesden.—Dr. Wm. Butler gives a table showing the number of cases of non-notifiable infectious diseases, information as to which was obtained by notification from school teachers as well as from other sources. By these means 1,678 cases of measles were heard of, and with the

aid of the staff of women health visitors it was possible to make inquiry into the cases. Out of the total, 436 cases were discovered by means of these house enquiries. It was found that in 1,014 cases only was a doctor in attendance.

Staines (rural).—Dr. Morris reports that measles was prevalent in the parishes of Ashford, Bedfont, Hanworth, and Shepperton

The deaths and death-rates in each district are set out in the following table:—

Measles, 1908.—Death-rates per 1,000 living.

Districts.	Death-rate.	Deaths recorded.
<i>Urban.</i>		
Acton	0·691	38
Brentford	0·061	1
Chiswick	0·027	1
Ealing (<i>Borough</i>)	0·019	1
Edmonton	0·315	19
Enfield	0·106	6
Feltham	0·677	4
Finchley	0·253	10
Friern Barnet	—	—
Greenford	—	—
Hampton	—	—
Hampton Wick	—	—
Hanwell	0·193	4
Harrow	—	—
Hayes	—	—
Hendon	0·157	5
Heston & Isleworth	0·114	4
Hornsey (<i>Borough</i>)	0·132	12
Kingsbury	—	—
Ruislip-Northwood	—	—
Southall-Norwood	—	—
Southgate	0·031	1
Staines	0·138	1
Sunbury	—	—
Teddington	0·055	1
Tottenham	0·327	47
Twickenham	0·111	3
Uxbridge	—	—
Wealdstone	—	—
Wembley	0·104	1
Willesden	0·369	55
Wood Green	—	—
<i>Rural.</i>		
Hendon	0·077	1
South Mimms	—	—
Staines	—	—
Uxbridge	—	—

WHOOPING COUGH.

The deaths which occurred in the whole county in 1908 from whooping cough were equal to a death-rate of 0·14 per 1,000 persons.

Whooping Cough.

Year.	Deaths (corrected).	Death-rate per 1,000.
1901	238	0·30
1902	225	0·27
1903	363	0·40
1904	172	0·18
1905	324	0·33
<i>Average 1901-1905</i>		<i>0·29</i>
1906	179	0·17
1907	341	0·32
1908	163	0·14

On examination of the above table, giving the death-rate since 1900, the noteworthy feature is the regularity of the bi-annual increase in the number of deaths, and in the absence of information as to the number of cases it is to be presumed that this corresponds with a bi-annual increase in the prevalence of the disease.

These deaths occurred at the following age periods:—

Whooping Cough.

Age Group.	Deaths.
0—	78
1—	78
5—	7
15—	—
25—	—
65—	—

COUNTY OF MIDDLESEX, 1908.

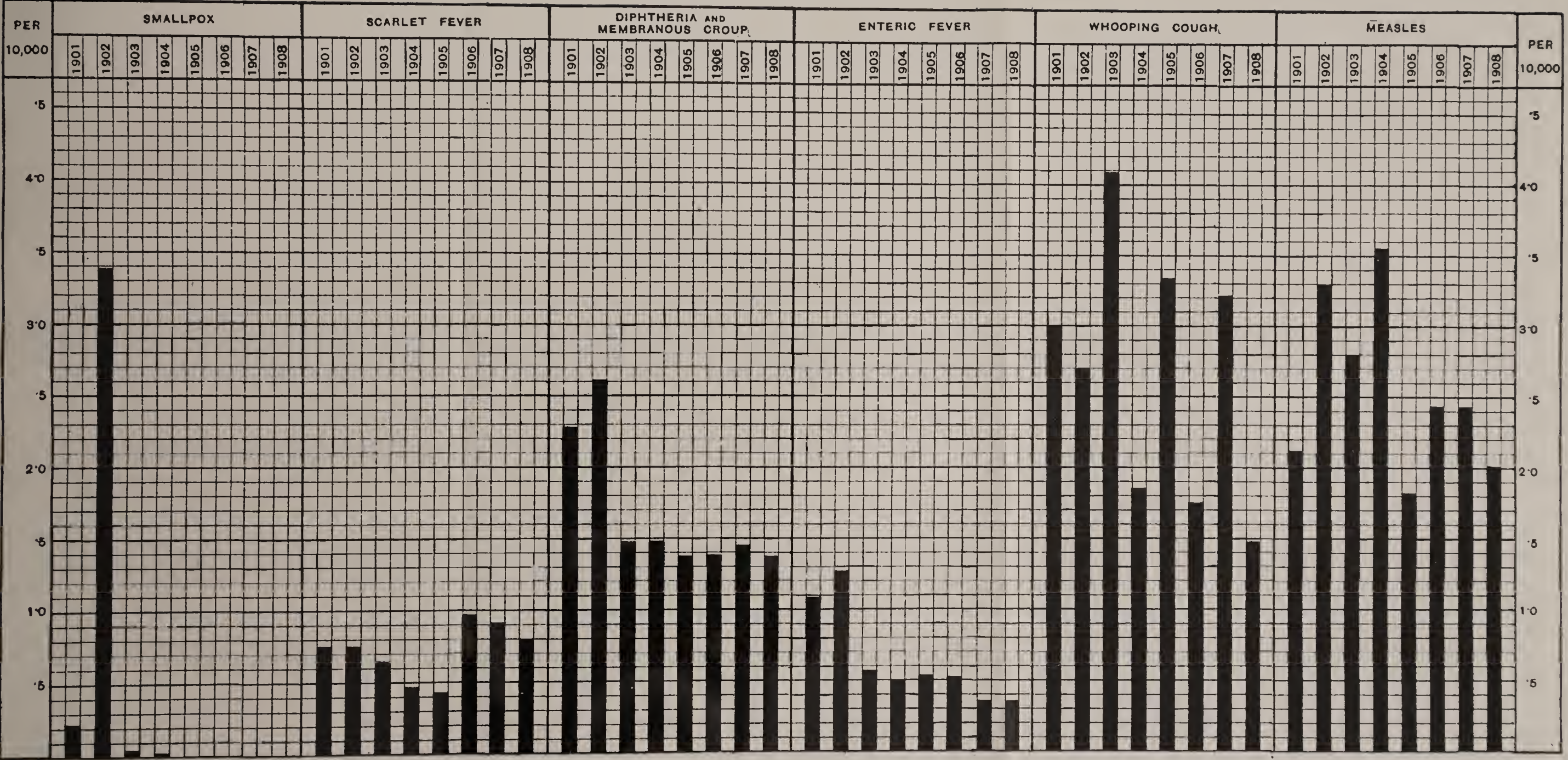


DIAGRAM 7,
SHOWING DEATH-RATES PER 10,000 PERSONS LIVING FROM CERTAIN INFECTIOUS DISEASES.

From the number of deaths recorded in the tables attached to the district reports, it appears that none took place in Feltham, Greenford, Hampton Wick, Hayes, Kingsbury, Ruislip-Northwood, Staines (urban), Wembley and Hendon (rural).

Control of this disease is, in practice, one of great difficulty, owing to the fact that it is not possible to diagnose it until the characteristic cough occurs, and before this the patient is probably in an infective condition. The fact that the complaint is by many regarded as a trifling ailment not needing the skilled attention of a doctor results in insufficient care being taken in avoiding the risk to which patients are liable of developing lung complications to which deaths are often due. This, no doubt, has much to do with the high mortality which at times attends the disease.

From the statements made in the reports it appears that whooping cough was prevalent in Acton during the second and fourth quarters of the year, and in Chiswick, an adjoining district, in the second quarter of the year. As regards Finchley and Friern Barnet, also adjoining districts, it is stated that but few cases occurred.

Dr. Steegmann, in his report on Heston and Isleworth, states that there was heavy mortality from whooping cough; out of 16 deaths, all under five years of age, 7 were infants under twelve months. He adds: "beyond excluding children from school when they are found to be suffering from this disease, practically nothing can be done to deal with it by sanitary administration. The heavy mortality is probably due to proper medical skill not having been obtained soon enough."

Dr. Coates, medical officer of Hornsey, reports that the disease was less fatal than in 1907.

In Twickenham the death-rate was heavy. The ten deaths which occurred were all children under two years of age, and in each case pneumonia or convulsions were complications of the disease.

In Willesden 252 cases came to the knowledge of Dr. Butler, the medical officer of health, by notification from school teachers and by the information gained by the staff of women health visitors at houses at which they were making enquiries. Of the total number it was found that in only 129 cases was a doctor in attendance. The death-rate here was less than in 1907.

The number of deaths and the death-rates in each district in 1908 are set out in the next table.

Whooping Cough, 1908.—Death-rates per 1,000 living.

District.					Death-rates.	Deaths recorded.
<i>Urban.</i>						
Acton	..	..	..	..	0·272	15
Brentford	..	..	..	..	0·061	1
Chiswick	..	..	..	..	0·302	11
Ealing (<i>Borough</i>)	..	..	..	..	0·235	12
Edmonton	..	..	..	..	0·249	15
Enfield	..	..	..	..	0·053	3
Feltham	..	..	..	..	—	—
Finchley	..	..	..	..	0·076	3
Friern Barnet	..	..	..	..	0·192	2
Greenford	..	..	..	..	—	—
Hampton	..	..	..	..	0·105	1
Hampton Wick	..	..	..	..	—	—
Hanwell	..	..	..	..	0·193	4
Harrow	..	..	..	..	0·062	1
Hayes	..	..	..	..	—	—
Hendon	..	..	..	..	0·126	4
Heston and Isleworth	..	..	..	..	0·458	16
Hornsey (<i>Borough</i>)	..	..	..	..	0·121	11
Kingsbury	..	..	..	..	—	—
Ruislip-Northwood	..	..	..	..	—	—
Southall-Norwood	..	..	..	..	0·089	2
Southgate	..	..	..	..	0·062	2
Staines	..	..	..	..	—	—
Sunbury	..	..	..	..	0·211	1
Teddington	..	..	..	..	0·165	3
Tottenham	..	..	..	..	0·062	9
Twickenham	..	..	..	..	0·370	10
Uxbridge	..	..	..	..	0·105	1
Wealdstone	..	..	..	..	0·170	2
Wembley	..	..	..	..	—	—
Willesden	..	..	..	..	0·087	13
Wood Green	..	..	..	..	0·178	9
<i>Rural.</i>						
Hendon	..	..	..	..	—	—
South Mimms	..	..	..	..	0·697	2
Staines	..	..	..	..	0·131	3
Uxbridge	..	..	..	..	0·295	4

DIARRHŒA.

The deaths from diarrhœa amongst residents of the county numbered 457, or a death rate of 0·41. This does not include deaths certified as due to enteritis.

The following table gives the figures since 1900 :—

Diarrhœa.

Year.	Deaths (corrected).	Death-rate per 1,000 living.
1901	723	0·91
1902	465	0·55
1903	449	0·50
1904	1,128	1·21
1905	547	0·60
<i>Average 1901-1905</i>		<i>0·75</i>
1906	1,106	1·09
1907	275	0·26
1908	457	0·41

With the exception of 1907, in which year the number of deaths was unusually low, the rate for 1908 was the lowest during the 8 years. This was, no doubt, in part dependent on the fact that the summer was a cool one.

Of the 457 deaths, 358 were amongst children under 1 year of age. This has already been referred to under infantile mortality, to which reference may be made.

The following table gives the figures and rates of the last 8 years :—

Diarrhœa—Deaths under one year of age.

Year.			Deaths.	Rate per 1,000 births.
1901	..	..	600	26·66
1902	..	..	385	16·19
1903	..	..	346	13·61
1904	..	..	922	34·93
1905	..	..	453	17·09
<i>Average 1901–1905</i>			..	21·73
1906	..	..	883	32·6
1907	..	..	225	8·1
1908	..	..	358	12·8

PHTHISIS AND OTHER FORMS OF TUBERCULOSIS.

In the following table is given the corrected number of deaths of Middlesex residents due to tuberculosis, in each of the last eight years. The deaths from consumption or

tuberculosis of the lungs are differentiated from the total number due to all forms of the disease :—

Year.	Phthisis.		All Tuberculous Disease.	
	Deaths (corrected).	Death-rate per 1,000 living.	Deaths (corrected).	Death-rate per 1,000 living.
1901	752	0·94	1,139	1·43
1902	843	1·01	1,277	1·53
1903	788	0·88	1,221	1·37
1904	993	1·06	1,428	1·53
1905	858	0·88	1,230	1·12
<i>Average 1901–1905</i>		0·95	—	1·42
1906	876	0·86	1,291	1·27
1907	888	0·84	1,257	1·19
1908	899	0·82	1,267	1·16

The figures of 1908 show that the tendency is towards decrease in the death-rates of phthisis and tuberculous disease. The deaths correspond to about one-ninth of the total deaths during the year, and tuberculosis in its various forms is the most frequent cause of death next to heart disease.

For the purpose of comparison the following figures relating to the adjoining county of London may be quoted from the Annual Summary (1908) of the Registrar-General. In 1908 the death-rate from phthisis was equal to 1·32 per 1,000 living, and varied in the different boroughs from 0·78 in Hampstead and 0·85 in Lewisham to 2·11 in Holborn and 2·15 in Finsbury.

In the following table the number of deaths from phthisis and from other forms of tuberculous disease are set out at different age-groups.

Deaths from Tuberculous Disease at different age-groups.

Age Group.	1901.		1902.		1903.		1904.	
	Phthisis.	Other Tuberculous Disease.	Phthisis.	Other Tuberculous Disease.	Phthisis.	Other Tuberculous Disease.	Phthisis.	Other Tuberculous Disease.
0-	8	124	15	147	12	149	11	163
1-	14	131	18	144	25	143	33	134
5-	33	70	22	70	33	57	40	65
15-	105	20	132	26	133	31	176	23
25-	562	38	623	44	556	51	696	39
65 and upwards	30	4	33	3	29	2	37	11

Age Group.	1905.		1906.		1907.		1908.	
	Phthisis.	Other Tuberculous Disease.	Phthisis.	Other Tuberculous Disease.	Phthisis.	Other Tuberculous Disease.	Phthisis.	Other Tuberculous Disease.
0-	7	104	6	114	7	106	9	106
1-	19	135	24	141	27	128	24	118
5-	28	62	28	66	26	59	28	72
15-	136	26	164	36	136	29	147	24
25-	632	42	629	51	650	42	659	46
65 and upwards	36	3	25	7	42	5	32	2

In last year's report I stated that a committee of the County Council had had under consideration a scheme for obtaining greater information as to the occurrence of cases of phthisis in the county. The scheme suggested was to ask the various Boards of Guardians if they would supply the County Council with the names and addresses of all consumptive patients admitted as in-patients to the Poor Law Infirmaries, with a view to such names being distributed to the medical officers of health of the various districts comprised in the area of the Union.

Before deciding as to whether the Guardians should be approached on the subject, the Committee instructed me to communicate with the local medical officers of health on the matter and to ascertain their opinion, and whether the information, if obtained, could be practically utilized.

From the replies to this letter which were received from the local medical officers of health, it was found that the suggestion that the County Council should endeavour to obtain this information was regarded as a very useful one, and it was generally stated that the information would be acted on. In the case of the areas of two Unions, however, namely, Staines and Willesden, it was found that the information could be more conveniently obtained locally.

On the receipt of these replies from the local medical officers of health, the County Council communicated with the Boards of Guardians of all the Unions except the two above mentioned, and asked if they would be prepared to supply the names and addresses of patients suffering from pulmonary consumption admitted to the respective

infirmaries, with a view to such names being forwarded by me to the local medical officers of health, and they with one exception, viz., the Board of Guardians of the Uxbridge Union, agreed with the proposal.

The result of the action taken was, that, from March up to the end of the year, 1908, or a period of nine months, notification was received from these bodies of 135 cases admitted to workhouse infirmaries. The names and addresses of these patients were then forwarded by me to the local medical officer of health of the district in which they resided previous to their admission to the infirmary, and these officers were thus able to have the premises visited and to take any action which appeared necessary.

The notifications received were as follows :—

Acton	23	Heston and Isle-	
Brentford ..	11	worth ..	13
Chiswick ..	3	Hornsey ..	4
Ealing	2	Southgate ..	2
Edmonton ..	21	Tottenham ..	27
Enfield	6	Twickenham ..	8
Hanwell.. ..	3	Wood Green ..	12

In addition to these, information was sent to me by the medical officer of health of the county of London of 4 patients who had been admitted to Brompton Hospital from districts in Middlesex.

At the end of the year, in view of the Public Health (Tuberculosis) Regulations, 1908, which were issued by the Local Government Board, and which provide for the

notification to medical officers of health of sanitary authorities of cases of pulmonary tuberculosis amongst persons in poor law institutions or under the care of district medical officers, it was, of course, no longer necessary to continue the scheme of notification which had been inaugurated by the Middlesex County Council.

Voluntary notification of cases of consumption is in force in a few districts in the county, but the results obtained in the last few years have not been very successful, and this applies even in districts where arrangements exist for sending suitable cases to a sanatorium for treatment.

As regards the separate districts the following is an abstract of the references to this disease :—

Acton.—Dr. Thomas reports that only 3 notifications were received during 1908, and, further, that the district council has not succeeded in obtaining a sufficient number of suitable applicants to occupy continuously the two beds maintained at the Northwood Sanatorium.

Ealing.—In his report for 1907, Dr. Patten referred to the fact that there had been difficulty in fully utilising the beds reserved at Northwood Sanatorium; this year, he states, that they have been occupied almost continuously.

Finchley.—Voluntary notification has been in force for 5 years, but with little result. Dr. Prior states that an additional step in dealing with the prevention of the disease was made in the district in 1908 by the coming into force of the Finchley Urban District Council Act which contains special provisions as respects milk from cows

suffering from tuberculosis. Reference is made to the fact that the district council agreed to take part in the provision of a sanatorium for residents in Middlesex, but owing to the fact that sufficient support to start the scheme was not given, it has not yet been started.

Hanwell.—Dr. Hope refers to the need of an institution for the treatment of cases.

Harrow.—Five cases of consumption were notified voluntarily, and disinfection of rooms was carried out, upon application, in several instances. Dr. Fletcher Little considers that there is need of a sanatorium.

Hendon (urban).—Dr. Andrew reports that there was increase in the number of deaths due to tuberculous disease.

Hornsey.—Dr. Coates points out that phthisis is still the principal cause of death in middle life, and he makes a statistical comparison of the mortality from tuberculosis and the seven chief epidemic diseases. The former disease caused in Hornsey 69 deaths (53 from phthisis, 16 from other tuberculous disease), whilst the latter accounted for 46 deaths in 1908. He adds: "Every death recorded from phthisis means that the victim has suffered an average of three to four years from the disease, and that for some considerable part of that period has been prevented by his illness from earning his living," which in many cases has entailed great hardship and privation on his family, and that the importance of preventive measures in this disease cannot be over-estimated.

Southall-Norwood.—Dr. Windle points out that many of the deaths occurred amongst persons who had only lived in the district a very short time, and he adds: "There is an increasing number of patients suffering from these diseases who come down from London to live here, on the advice of their doctor." In such cases the infection would, therefore, have not been contracted in the district.

Southgate.—Dr. Ransome writes that when he receives information of a case, the house is visited, instructions in the form of printed leaflets pointing out the nature and danger of the disease are given, and, where necessary, disinfection of rooms is carried out.

Sunbury.—Dr. Byham refers to the advantage of treatment of suitable cases in sanatoria, and expresses satisfaction that an institution of this class is likely to be provided by private enterprise for the use of Middlesex residents.

Tottenham.—Dr. Butler-Hogan, the medical officer of health, again recommends the desirability of maintaining some beds at a sanatorium for the use of the residents in the district.

Uxbridge (urban).—Dr. Lock expresses the hope that the district council will support the provision of a sanatorium for the use of persons residing in Middlesex with a view to treatment of cases at an early stage of the disease, and so "prevent so many cases getting to such an advanced stage that they are compelled to seek relief in the workhouse infirmary." He adds that if "the Guardians of the Poor would admit early cases when substantial good can be

done, it would be a great boon, as the accommodation now existing at the infirmary at Hillingdon is in every way suitable for the treatment of such cases."

Wealdstone.—Dr. Butler states that it is difficult to induce early cases to go into a sanatorium, but considers provision for this class of case should be made, as well as for the isolation of advanced cases.

Wembley and Uxbridge (rural).—Dr. Goddard and Dr. Charpentier also write as to the need of the provision of a sanatorium.

The death-rates per 1,000 living in each district are given in the following table:—

Phthisis and all Tuberculous Diseases, 1908. Death-rates per 1,000 living.

District.	Death-rates.		Deaths recorded.	
	Phthisis.	All Tuberculous Diseases.	Phthisis.	All Tuberculous Diseases.
<i>Urban.</i>				
Acton	1 018	1 528	56	84
Brentford	0 988	1 606	16	26
Chiswick	0 797	1 210	29	44
Ealing (<i>Borough</i>)	0 785	1 019	40	53
Edmonton	0 897	1 545	54	93
Enfield	0 819	1 158	46	65
Feltham	1 186	2 204	7	13
Finchley	0 532	0 734	21	29
Friern Barnet	0 672	0 960	7	10
Greenford	0 931	0 931	1	1
Hampton	1 158	1 368	11	13
Hampton Wick	1 126	1 126	3	3
Hanwell	0 629	1 064	13	22
Harrow	0 806	0 868	13	14
Hayes	0 285	0 571	1	2
Hendon	0 913	1 386	29	44
Heston & Isleworth	1 032	1 262	36	44
Hornsey (<i>Borough</i>)	0 583	0 759	53	69
Kingsbury	—	—	—	—
Ruislip-Northwood	0 530	0 530	3	3
Southall-Norwood	0 850	1 298	19	29
Southgate	0 562	0 843	18	27
Staines	0 277	0 554	2	4
Sunbury	1 692	1 692	8	8
Teddington	0 441	0 993	8	18
Tottenham	0 495	1 178	71	169
Twickenham	0 926	1 334	25	36
Uxbridge	1 270	1 588	12	15
Wealdstone	0 765	1 104	9	13
Wembley	0 520	0 625	5	6
Willesden	0 805	1 026	120	153
Wood Green	0 534	0 851	27	43
<i>Rural.</i>				
Hendon	—	0 232	—	3
South Mimms	0 697	0 697	2	2
Staines	0 526	0 833	12	19
Uxbridge	0 885	1 770	12	24

CANCER.

In the following table are shown the death-rates due to all forms of cancer amongst residents in the county :—

Cancer.

Year.	Deaths.	Death-rate per 1,000 living.
1901	642	0·80
1902	665	0·79
1903	731	0·82
1904	712	0·76
1905	788	0·81
<i>Average 1901-1905</i>		<i>0·80</i>
1906	836	0·82
1907	856	0·81
1908	873	0·80

MIDWIVES ACT, 1902.

The work carried out by the County Council during 1908 under the provisions of this Act is shown in the following account.

At the commencement of the year notice was sent to those midwives who had notified the County Council during the previous year, reminding them of the necessity of notifying the County Council, and forms were enclosed upon which they could do so. Further, when the Midwives Roll for 1908 was issued by the Central Midwives Board, it was perused, and the names and addresses extracted of those midwives residing in Middlesex and whose names appeared on the Roll for the first time. Information was

then sent them regarding the provisions of Section 10 of the Act. This section is as follows:—

“ 10. Every woman certified under this Act shall,
“ before holding herself out as a practising midwife or
“ commencing to practise as a midwife in any area, give
“ notice in writing of her intention so to do to the local
“ supervising authority, or to the body to whom for the
“ time being the powers and duties of the local supervising
“ authority shall have been delegated under this Act, and
“ shall give a like notice in the month of January in every
“ year thereafter during which she continues to practise in
“ such area.

“ Such notice shall be given to the local supervising
“ authority of the area within which such woman usually
“ resides or carries on her practice, and the like notice shall
“ also be given to every other local supervising authority
“ or delegated body within whose area such woman at any
“ time practises or acts as a midwife within forty-eight
“ hours at the latest after she commences so to practise or
“ act.

“ Every such notice shall contain such particulars as may
“ be required by the rules under this Act to secure the
“ identification of the person giving it; and if any woman
“ omits to give the said notices or any of them, or
“ knowingly or wilfully makes or causes or procures any
“ other person to make any false statement in any such
“ notice she shall on summary conviction be liable to a fine
“ not exceeding five pounds.”

As result of the procedure adopted and of the inquiries made during routine inspection there is no reason to think that failure as regards notification of intention to practise occurs in the County.

Certified Women.—During 1908 notifications under this section were received from 229 midwives. The districts in which these midwives resided will be seen from the following table.

Acton	11
Brentford	3
Chiswick	14
Ealing	7
Edmonton	24
Enfield	13
Feltham	5
Finchley	3
Hampton	1
Hanwell	1
Harrow	1
Hendon (U.)	5
Heston-Isleworth	19
Hornsey	5
Southall-Norwood	4
Southgate	5
Staines (U.)	4
Sunbury	2
Teddington	5
Tottenham	21
Twickenham	8
Uxbridge (U.)	1
Wealdstone	1
Willesden	19
Wood Green	7
Hendon (R.)	1
Staines (R)	11
Uxbridge (R.).. .. .	3
Extra County	16
Temporary	9
	<hr/>
	229
	<hr/>

The County Council received no notifications during 1908 from women residing in the following districts, but there is no reason to think that certified midwives living therein practised during the year:—

Friern Barnet.	Kingsbury.
Greenford.	Ruislip-Northwood
Hampton Wick.	Wembley.
Hayes.	South Mimms.

In addition to the number given above, there were 469 other certified midwives residing in the County. These all received information of the provisions of the Act and most were also visited, but no evidence was obtained that they were acting as midwives.

Thus, the number of certified midwives in the County was as follows:—

Notified midwives	..	..	..	..	229
Midwives who have not notified	..	..	..	..	469
					<hr/>
Total	..	..	..	..	698
					<hr/>

The *qualifications* of the practising midwives are given below:—

53 have passed the Examination of the Central Midwives Board.

67 possess the L.O.S. certificate.

12 possess hospital certificates other than the L.O.S. certificate.

97 were enrolled by reason of having been in *bonâ fide* practice previous to the passing of the Act, but

4 possess a hospital certificate.

Number of births attended by midwives residing in the County and on the borders of the County.—At the end of the year forms were sent to each certified midwife asking her to state the number of cases she had attended during the year in her capacity as a midwife, and as a nurse under a doctor. These forms were sent not only to those actually residing in the county, but also to a few who live a short distance outside the county boundary—chiefly in London—but who are known to attend cases in Middlesex and who have accordingly notified the Council of carrying on practice in Middlesex. The latter women cannot always discriminate between the cases which they have attended in the one or other area, so that the figures given by them cannot be regarded as referring only to residents in Middlesex; there is little doubt indeed that they include women confined just within London. Further, some of the midwives residing just within the boundary of Middlesex attend cases which occur in London, and these would be included in the figures returned by them.

Not including the figures returned by these women, it appears that during 1908 midwives residing in the County attended 8,238 births without a doctor, whilst in 950 other cases they attended as nurses under a doctor. The details as to this are as follows:—

Number of Births attended by Midwives, 1908.

Midwives residing in	Number of cases attended in capacity of midwife.	No. of cases attended by midwives as nurse under doctor.
Acton	636	67
Brentford	363	12
Chiswick	250	67
Ealing .. .	135	51
Edmonton	960	8
Enfield.. ..	550	77
Feltham	100	16
Finchley	22	9
Hampton	40	14
Hanwell	14	3
Hendon	250	137
Heston-Isleworth ..	381	85
Hornsey	31	31
Southall-Norwood ..	113	20
Southgate	67	30
Staines (U)	70	7
Sunbury	63	3
Teddington	213	18
Tottenham	1,554	22
Twickenham	355	60
Uxbridge	—	5
Wealdstone	36	8
Willesden	1,474	137
Wood Green	274	8
Staines (Rural) ..	186	22
Uxbridge (Rural) ..	201	33
Total	8,238	950
Extra County.. ..	1,351	63

The total number of births registered in the County—being 27,778, it appears, therefore, that midwives attended about one-third.

Notifications.—Midwives are required, by the Rules of the Central Midwives Board, to notify the County Council whenever they advise medical assistance being called in, and whenever stillbirths and deaths occur. The notifications received during the year were as follows:—

Medical aid..	..	..	..	..	659
Stillbirths ..	..	..	..	..	158
Death of infants ..	..	..	..	..	28

The reasons for sending for medical aid were:—

High temperature ..	..	..	..	39
Contracted pelvis ..	..	..	..	8
Premature birth ..	..	..	..	9
Prolonged and difficult labour ..	..	..	..	102
Retained placenta or membranes..	..	..	..	33
Hæmorrhage ..	..	..	..	6
Ante-partum hæmorrhage ..	..	..	..	14
Post-partum hæmorrhage..	..	..	..	20
Placenta prævia ..	..	..	..	9
Prolapse of cord ..	..	..	..	7
Ruptured perinæum ..	..	..	..	51
Abnormal presentation ..	..	..	..	42
Prolapse of uterus..	..	..	..	1
Abortion or miscarriage ..	..	..	..	9
Eclampsia ..	..	..	..	5
Stillbirth ..	..	..	..	27
Unsatisfactory condition of mother ..	..	..	..	53
„ „ child ..	..	..	..	153
Eyes ..	..	..	..	11
Premature birth ..	..	..	..	59
Doctor to conduct delivery ..	..	..	..	1

There is an increase in the number of notifications as compared with the previous year, and this, no doubt, is due to the visits to the midwives by the Council's officers.

The following table shows the results of the inquiries into cases of stillbirth. From the inquiries made, no evidence was obtained to justify suspicion that the stillbirth was in any case due to negligence or malpractice on the part of the midwife,

Year		Number of cases		Number of stillbirths	
1900	1901	1902	1903	1904	1905
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102
103	104	105	106	107	108
109	110	111	112	113	114
115	116	117	118	119	120
121	122	123	124	125	126
127	128	129	130	131	132
133	134	135	136	137	138
139	140	141	142	143	144
145	146	147	148	149	150
151	152	153	154	155	156
157	158	159	160	161	162
163	164	165	166	167	168
169	170	171	172	173	174
175	176	177	178	179	180
181	182	183	184	185	186
187	188	189	190	191	192
193	194	195	196	197	198
199	200	201	202	203	204
205	206	207	208	209	210
211	212	213	214	215	216
217	218	219	220	221	222
223	224	225	226	227	228
229	230	231	232	233	234
235	236	237	238	239	240
241	242	243	244	245	246
247	248	249	250	251	252
253	254	255	256	257	258
259	260	261	262	263	264
265	266	267	268	269	270
271	272	273	274	275	276
277	278	279	280	281	282
283	284	285	286	287	288
289	290	291	292	293	294
295	296	297	298	299	300
301	302	303	304	305	306
307	308	309	310	311	312
313	314	315	316	317	318
319	320	321	322	323	324
325	326	327	328	329	330
331	332	333	334	335	336
337	338	339	340	341	342
343	344	345	346	347	348
349	350	351	352	353	354
355	356	357	358	359	360
361	362	363	364	365	366
367	368	369	370	371	372
373	374	375	376	377	378
379	380	381	382	383	384
385	386	387	388	389	390
391	392	393	394	395	396
397	398	399	400	401	402
403	404	405	406	407	408
409	410	411	412	413	414
415	416	417	418	419	420
421	422	423	424	425	426
427	428	429	430	431	432
433	434	435	436	437	438
439	440	441	442	443	444
445	446	447	448	449	450
451	452	453	454	455	456
457	458	459	460	461	462
463	464	465	466	467	468
469	470	471	472	473	474
475	476	477	478	479	480
481	482	483	484	485	486
487	488	489	490	491	492
493	494	495	496	497	498
499	500	501	502	503	504
505	506	507	508	509	510
511	512	513	514	515	516
517	518	519	520	521	522
523	524	525	526	527	528
529	530	531	532	533	534
535	536	537	538	539	540
541	542	543	544	545	546
547	548	549	550	551	552
553	554	555	556	557	558
559	560	561	562	563	564
565	566	567	568	569	570
571	572	573	574	575	576
577	578	579	580	581	582
583	584	585	586	587	588
589	590	591	592	593	594
595	596	597	598	599	600
601	602	603	604	605	606
607	608	609	610	611	612
613	614	615	616	617	618
619	620	621	622	623	624
625	626	627	628	629	630
631	632	633	634	635	636
637	638	639	640	641	642
643	644	645	646	647	648
649	650	651	652	653	654
655	656	657	658	659	660
661	662	663	664	665	666
667	668	669	670	671	672
673	674	675	676	677	678
679	680	681	682	683	684
685	686	687	688	689	690
691	692	693	694	695	696
697	698	699	700	701	702
703	704	705	706	707	708
709	710	711	712	713	714
715	716	717	718	719	720
721	722	723	724	725	726
727	728	729	730	731	732
733	734	735	736	737	738
739	740	741	742	743	744
745	746	747	748	749	750
751	752	753	754	755	756
757	758	759	760	761	762
763	764	765	766	767	768
769	770	771	772	773	774
775	776	777	778	779	780
781	782	783	784	785	786
787	788	789	790	791	792
793	794	795	796	797	798
799	800	801	802	803	804
805	806	807	808	809	810
811	812	813	814	815	816
817	818	819	820	821	822
823	824	825	826	827	828
829	830	831	832	833	834
835	836	837	838	839	840
841	842	843	844	845	846
847	848	849	850	851	852
853	854	855	856	857	858
859	860	861	862	863	864
865	866	867	868	869	870
871	872	873	874	875	876
877	878	879	880	881	882
883	884	885	886	887	888
889	890	891	892	893	894
895	896	897	898	899	900
901	902	903	904	905	906
907	908	909	910	911	912
913	914	915	916	917	918
919	920	921	922	923	924
925	926	927	928	929	930
931	932	933	934	935	936
937	938	939	940	941	942
943	944	945	946	947	948
949	950	951	952	953	954
955	956	957	958	959	960
961	962	963	964	965	966
967	968	969	970	971	972
973	974	975	976	977	978
979	980	981	982	983	984
985	986	987	988	989	990
991	992	993	994	995	996
997	998	999	1000	1001	1002
1003	1004	1005	1006	1007	1008
1009	1010	1011	1012	1013	1014
1015	1016	1017	1018	1019	1020
1021	1022	1023	1024	1025	1026
1027	1028	1029	1030	1031	1032
1033	1034	1035	1036	1037	1038
1039	1040	1041	1042	1043	1044
1045	1046	1047	1048	1049	1050
1051	1052	1053	1054	1055	1056
1057	1058	1059	1060	1061	1062
1063	1064	1065	1066	1067	1068
1069	1070	1071	1072	1073	1074
1075	1076	1077	1078	1079	1080
1081	1082	1083	1084	1085	1086
1087	1088	1089	1090	1091	1092
1093	1094	1095	1096	1097	1098
1099	1100	1101	1102	1103	1104
1105	1106	1107	1108	1109	1110
1111	1112	1113	1114	1115	1116
1117	1118	1119	1120	1121	1122
1123	1124	1125	1126	1127	1128
1129	1130	1131	1132	1133	1134
1135	1136	1137	1138	1139	1140
1141	1142	1143	1144	1145	1146
1147	1148	1149	1150	1151	1152
1153	1154	1155	1156	1157	1158
1159	1160	1161	1162	1163	1164
1165	1166	1167	1168	1169	1170
1171	1172	1173	1174	1175	1176
1177	1178	1179	1180	1181	1182
1183	1184	1185	1186	1187	1188
1189	1190	1191	1192	1193	1194
1195	1196	1197	1198	1199	1200
1201	1202	1203	1204	1205	1206
1207	1208	1209	1210	1211	1212
1213	1214	1215	1216	1217	1218
1219	1220	1221	1222	1223	1224
1225	1226	1227	1228	1229	1230
1231	1232	1233	1234	1235	1236
1237	1238	1239	1240	1241	1242
1243	1244	1245	1246	1247	1248
1249	1250	1251	1252	1253	1254
1255	1256	1257	1258	1259	1260
1261	1262	1263	1264	1265	1266
1267	1268	1269	1270	1271	1272
1273	1274	1275	1276	1277	1278
1279	1280	1281	1282	1283	1284
1285	1286	1287	1288	1289	1290
1291	1292	1293	1294	1295	1296
1297	1298	1299	1300	1301	1302
1303	1304	1305	1306	1307	1308
1309	1310	1311	1312	1313	1314
1315	1316	1317	1318	1319	1320
1321	1322	1323	1324	1325	1326
1327	1328	1329	1330	1331	1332
1333	1334	1335	1336	1337	1338
1339	1340	1341	1342	1343	1344
1345	1346	1347	1348	1349	1350
1351	1352	1353	1354	1355	1356

Age of Fœtus.	No. Notified.	No. Macerated or Decomposed.	No. occurring in		Previous Stillbirths or Miscarriages.	Presentations.					Sex of Fœtus.			
			1st Pregnancy.	Subsequent Pregnancies.		Vertex.	Breech.	Transverse.	Funis.	Protrusion of Funis with other presentations.	B.B.A.	M.	F.	
Full term ..	106	21	11	95	29 cases	67	19	5	7	7	8	51	55	—
8 months ..	31	19	2	29	10 cases	19	6	—	4	1	2	16	15	—
7 months ..	36*	18	6	30	15 cases	20	6	4	6	—	1	20	17	—
6 months ..	16*	7	1	15	6 cases	11	—	3	1	1	2	5	12	—
Under 6 mths. . .	14†	4	3	11	5 cases	4	—	—	1	—	5	9	3	In four cases sex not given. In six cases presentation not given.

In four cases sex not given.
In six cases presentation not given.

* One case of twins, both stillborn.

† Two cases of twins

In connection with the above notifications received from midwives, routine inquiry into the circumstances is made in each case and the facts are reported to the Committee.

Several inquests were held by the Coroners during the year in reference to cases in which midwives were concerned, and these are always, if possible, attended either by the Council's inspector or myself.

Puerperal Fever.—By the courtesy of the district medical officers of health immediate information is now usually obtained from them as soon as they receive a notification as to this disease. If it is found that a midwife has been in attendance, she is visited without delay and instructed as to the course she is to take; in four instances it was found desirable under the circumstances, and with a view to prevent risk of the spread of infection, temporarily to suspend the midwife from practice. In one of these cases the midwife stated that she was suffering from a sore on her leg. She was at once suspended from attending any further cases until she could satisfy the authority that the sore was healed. She was quite willing not again to act as a midwife until this had taken place, but preferred to treat the leg herself rather than consult a doctor. She has been kept continually under observation, and up to the end of the year, that is, after the lapse of several months, no cases had been attended by her as a midwife.

The total number of cases of puerperal fever notified as having occurred in the practice of midwives was 12. From what has been said above as to the difficulty of arriving at the precise number of cases attended by midwives, it is not possible to say precisely what percentage this bears to the number of cases attended by them in the County

but approximately I think it may be taken as representing twelve cases in about 8,000 births.

The total number of cases of puerperal fever notified in the County in recent years, and the numbers in the practice of midwives, is shown in the following table.

Year.	Total Cases Notified.	Cases occurring in Practices of Certified Midwives.	Total Births Registered.	Births attended by Midwives.
1904	56	Not known.	—	—
1905	53	12	—	—
1906	56	15	—	—
1907	52	9	27,768	7,617 ⁽¹⁾
1908	44	12	27,778	8,238 ⁽²⁾

(¹) Including cases attended by midwives on borders of, but outside, County.

(²) Excluding ditto (viz., 1,351).

As regards four cases of puerperal fever, it was found that the patients had been attended in their confinements by uncertified women.

Action taken by the Local Supervising Authority.—The following particulars as to action taken in connection with the administration of the Act may be given.

	Midwives.
Cautionary letters sent by the Council to ..	8
Suspended from practice under section 8 (3)	
to prevent the spread of infection ..	4
Reported to the Central Midwives Board ..	2
Removed from Roll by Central Midwives Board	1
Deaths of Midwives notified to C.M.B. ..	1
Given up practising as midwife	1

Apart from this, directions and verbal cautions are given during the course of routine inspection, and letters are written instructing midwives on matters which do not call for official action by the Council.

Uncertified Women.—It is provided in the Midwives Act, 1902, which came into operation in 1903, that the full provisions of the Act, namely, to limit the practice of midwifery to those women who are certified midwives, shall not come into force until April 1st, 1910. Up to this last named date no power is given to prevent any woman attending others in their confinement, whatever her capabilities for the work may be, so long as she does not call herself a midwife or take any title implying that she is a person specially qualified to practice midwifery.

On the first of April, 1910, section 1, sub-section (2) of the Act comes into operation, and this is to the following effect:—

“From and after the first day of April one thousand nine hundred and ten, no woman shall habitually and for gain attend women in childbirth otherwise than under the direction of a qualified medical practitioner unless she be certified under this Act; any woman so acting without being certified under this Act shall be liable on summary conviction to a fine not exceeding ten pounds, provided this section shall not apply to legally qualified medical practitioners, or to anyone rendering assistance in a case of emergency.”

During the whole of the period that midwives have been under supervision in the County, every opportunity has

been made use of to obtain information as to those women who, not being certified, are still attending confinements to a considerable extent; records as to the information obtained have been kept, and the women have been visited.

The object of this was primarily to see that they were not committing a breach of Section 1 (1) of the Act, but, in addition: (*a*) to see to what extent, if any, there might be a shortage of midwives and possible hardship to the poorer class in 1910, when uncertified women can no longer go on doing the work habitually; (*b*) to enable the Council to inform these women of the provision of the Act which comes into operation on April 1st, 1910.

In view of the power which comes into operation in 1910, I have thought it desirable to make complete inquiry recently as to the women throughout the County who, although not certified, are still doing midwifery, in order: (1) to ascertain to what extent they are attending cases: and (2) that the Council may be in a position to take any necessary action when the time arrives.

The facts which have so far been obtained show that some 59 women are engaged in more or less active practice, although they are not certified under the Act, and from the admissions made by them when visited, it would appear that during 1908 they attended a total of about 750—800 cases. For comparison it may be stated that during the same period the certified midwives attended 8,238 cases.

Further detail as to the different parts of the County in which these uncertified women reside and carry on their work, the number of such women in each area, divided into those who only occasionally go to cases—perhaps rather

as a matter of emergency—and those who habitually practise, together with the number of certified women practising in the respective areas during 1908, is given in the following table:—

	Uncertified Midwives		Certified Midwives practising, 1908.
	Who attended less than 15 cases during the year.	Who attended over 15 cases during the year.	
<i>Urban.</i>			
Acton	6	3	11
Brentford .. ..	..	..	3
Chiswick	4	2	14
Ealing (<i>Borough</i>)	1	..	7
Edmonton .. ..	..	2	24
Enfield	3	3	13
Feltham .. ..	..	..	5
Finchley .. ..	..	..	3
Friern Barnet .. ..	..	1	..*
Greenford .. ..	..	..	..
Hampton .. ..	..	..	1
Hampton Wick .. ..	..	..	..
Hanwell	1	..	1
Harrow .. ..	..	..	1
Hayes .. ..	..	..	..
Hendon .. ..	..	..	5
Heston & Isleworth	6	2	19
Hornsey (<i>Borough</i>)	3	2	5
Kingsbury .. ..	..	..	..
Ruislip-Northwood .. ..	..	..	..

				Uncertified Midwives		Certified Midwives practising, 1908.
				Who attended less than 15 cases during the year.	Who attended over 15 cases during the year.	
<i>Urban—continued.</i>						
Southall-Norwood ..	..	..	..	3	1	4
Southgate ..	..	..	..	1	1	5
Staines ..	..	..	..	..	..	4
Sunbury ..	..	..	..	..	..	2
Teddington..	..	..	..	..	..	5
Tottenham ..	..	..	..	..	..	21
Twickenham ..	..	..	..	1	..	8
Uxbridge ..	..	..	..	..	..	1
Wealdstone ..	..	..	..	..	..	1
Wembley ..	..	..	..	..	..	..*
Willesden ..	..	..	..	..	..	19
Wood Green ..	..	..	..	4	..	7
<i>Rural.</i>						
Hendon ..	..	..	..	1	..	1
South Mimms ..	..	..	..	..	..	..
Staines ..	..	..	..	3	1	11
Uxbridge ..	..	..	..	1	..	3
Extra County ..	..	..	..	1	..	16

A certified Midwife in each of the districts of Friern Barnet and Wembley has notified her intention of practising during 1909.

From the above it appears that of the 57 uncertified women doing the work 39 occasionally attend cases, but only 18 can be said to do the work "habitually and for gain," and of the last mentioned only 6, it has been ascertained, did 50 or more cases during the year 1908.

As regards the question whether any hardship will arise owing to shortage of midwives when uncertified women have to give up doing the work, I think the above figures tend to show that this is not likely to occur. Further, it may be stated that not only are the more populous parts of the County now fairly supplied with certified women but that many of the latter would attend a greater number of cases than they do at present judging by the number attended by others in the same vicinity. It is possible that in some of the more rural parts of the County slight difficulty may at first be felt, but I am not prepared to suggest that this will not adjust itself after a short time by some certified midwife deciding to set up in any such district.

This is a process that has been gradually going on in different parts since the work has been under supervision. Thus at the commencement of 1905 there were 96 certified women in the County who notified the Council of their intention to practise and 273 uncertified women still doing the work, whereas in 1908 a total of 229 certified women notified the Council and at the end of that year there were 57 uncertified women.

Further, it should be remembered that so far as Middlesex is concerned there are but few parts in which houses are situated at any considerable distance from the house of a medical man.

From the facts which have been obtained so far in this inquiry it may be gathered:—

- (1) That the system of inspection which has been carried out by the Council during the time the Act has been in force has been effectual in materially reducing the number of unqualified and often ignorant and dirty women, their places having been taken by certified and in most cases trained midwives. I may say that this has been assisted by the fact that in some cases the Coroners have held inquests on deaths which have occurred in cases attended by the former class of women, and the publicity given to the circumstances has no doubt been effectual in deterring them from attending any more cases.
- (2) That no great difficulty should arise in 1910 in obtaining the assistance of persons qualified to do midwifery, by women needing such assistance, and that any shortage in certified midwives is likely to adjust itself by natural means.

ISOLATION HOSPITALS.

As in previous reports, this subject is dealt with in two parts.

(a) The hospital accommodation provided for the ordinary infectious diseases — that is, scarlet fever, diphtheria and enteric fever.

(b) The hospital accommodation for small-pox.

(a) The hospital provision for ordinary infectious diseases.

The facts as to this may first be summarised, and then details will be given as to any changes which have taken place in the separate areas during 1908.

The following districts have provided hospitals:—

Acton.	Ruislip-Northwood (a con-
Brentford.	stituent authority in
Chiswick.	Uxbridge Joint Hospital
Ealing.	Board).
Edmonton } Joint Hospital	Southall-Norwood.
Enfield } Board.	Southgate.
Hampton.	Twickenham.
Harrow.	Uxbridge (urban) (a con-
Hayes (a constituent authority	stituent authority in
in the Uxbridge Joint	Uxbridge Joint Hospital
Hospital Board).	Board).
Hendon (urban) (a tempo-	Willesden.
rary structure for scarlet	Hendon (rural).
fever only).	Uxbridge (rural) (a con-
Heston and Isleworth (in	stituent authority in
conjunction with Rich-	Uxbridge Joint Hospital
mond).	Board).
Hornsey.	

Of the remaining 16 districts, the local authorities of the following areas have made arrangements, mostly for a period of years, to have cases treated at the hospitals provided by some of the above districts:—

Finchley, arrangement with Hornsey.

Greenford, arrangement with Ealing.

Hampton Wick, arrangement with Hampton.

Teddington, arrangement with Hampton.

Tottenham. In this district one of the hospitals of the Metropolitan Asylums Board is situated, and beds are specially reserved here for the use of Tottenham residents.

Wealdstone, arrangement with Hendon (rural).

Wood Green, arrangement with Hornsey.

Further details as to the respective districts will be found in the following account:—

Acton.—In last year's report it was stated that the question of enlargement of the hospital was being considered. During 1908 a special report on the matter, a copy of which is embodied in the annual report, was presented by the chairman of the Health Committee and the medical officer of health. The Committee adopted the recommendations and instructed the surveyor to prepare plans. The improvements consist of an additional pavilion ward for 36 beds to be used for scarlet fever cases, and increase in the administrative block.

During the year 423 patients were admitted to the hospital.

Chiswick.—This hospital, situated at Clayponds Road, Brentford, contains two wards for scarlet fever and a separate block for diphtheria and enteric fever. Eighty patients were admitted in 1908.

Enfield and Edmonton Joint Hospital.—In January a Local Government Board inquiry was held on an

application to borrow £5,200 "to build a block of two wards to replace a temporary building," half of which had been destroyed by fire in the previous year.

There was much pressure on the accommodation in this hospital at the end of the year, owing to an outbreak of diphtheria.

Feltham.—See remarks under Staines.

Finchley.—Dr. Prior states that the agreement with Hornsey ends in 1913, that the accommodation available is at times insufficient, and that a special sub-committee has been appointed to consider the question of future arrangements. See remark under Hendon (urban).

Friern Barnet.—During 1908 this district was still unprovided with hospital accommodation. Negotiations were proceeding, however, with the Southgate district council with a view to cases occurring in the district being sent to the hospital of the latter authority.

Early in 1909 satisfactory arrangements were concluded, and the Southgate district council applied for a loan to enable them to enlarge their hospital.

Greenford.—Arrangement with Ealing.

Hampton.—The hospital consists of one pavilion, with four wards for scarlet fever and diphtheria. There is an administrative block, a laundry and disinfecting chamber block, coachhouse and a mortuary.

Hampton Wick.—Arrangement with Hampton. In this district there are some “scattered homes” belonging to the guardians of the Kingston Union. Any cases occurring in these are, by arrangement, sent to Tolworth isolation hospital in Surrey.

Hanwell.—Dr. Hope writes that the district is unfortunately still without an isolation hospital, but he adds that the difficulty in settling the question of providing one, “which is now a legal one, is being overcome, and the matter is receiving all the attention that can be given to it.” He adds that in the meantime an arrangement “is being made with Ealing which I hope will prove successful, as we are badly in need of such till our own hospital can be erected.”

Hayes.—See Uxbridge Joint Hospital.

Hendon (urban).—The hospital is “a temporary structure, and consists of two wards capable of properly treating four patients in each. In addition there is a large ward for convalescents and a small ward for special cases capable of holding three beds.”

Dr. Andrews states that there was great pressure on the accommodation during the latter part of the year. As a result, the engineer has been instructed to get out plans for the erection of an additional ward to meet the present need, and until the question of providing a permanent hospital with accommodation for diphtheria is fully considered.

This district adjoins Finchley, in which the question of hospital accommodation is also under consideration, and

the suggestion arises whether it would not be well for these two authorities to consider the question of combining with a view to the provision of one hospital jointly. Such arrangement would avoid the duplication of various buildings, each essential to a hospital, such as administrative block, laundry and disinfection block, and mortuary, and it would probably lead to greater economy as only one staff would be necessary.

Heston and Isleworth.—Dr. Steegmann refers to the need which exists for increasing the accommodation at this hospital, and which he has recommended in previous reports.

Ruislip-Northwood.—See Uxbridge Joint Hospital.

Southall-Norwood.—Dr. Windle states that the need of providing accommodation for cases of enteric fever is likely to arise in the near future, owing to the fact that “most of the general hospitals now decline to take these cases.”

Southgate.—This hospital is to be enlarged, and arrangement has been made with Friern Barnet to admit cases from the latter district.

Staines (Urban).—See Staines Joint Hospital Board.

Sunbury.—See Staines Joint Hospital Board.

Teddington.—Arrangement has been made to send cases to the hospital of the Hampton district council or to Tolworth isolation hospital in Surrey.

Twickenham.—The erection of the new hospital was completed during the year; it was opened early in 1909.

Uxbridge (Urban).—See Uxbridge Joint Hospital Board.

Wembley.—Dr. Goddard writes:—"I would again strongly urge you to seek a proper site for a well-equipped modern, hospital capable of treating cases of diphtheria, typhoid and scarlatina concurrently."

Willesden.—Dr. Wm. Butler reports—"having regard to the growth of population, the strain upon the resources of the hospital experienced during the year, and the probable demands likely to be made upon it during the current year, I am of opinion that further provision by additions to the hospital is called for."

Uxbridge Joint Hospital Board.—In the County report for 1905, a copy of a special report by Dr. Davidson and myself was included on the subject of the alterations and improvements which we considered were needed at the hospital of this board. Our recommendations were fully adopted and the work was completed in 1908. Briefly, the alterations consist of:—

- (1) A new administration block, with a sitting room and bedroom for the matron, eight bedrooms for nurses, a common sitting room, dining room, doctor's room and kitchens.
- (2) A new ward pavilion for scarlet fever for 16 beds and 4 cots.
- (3) A new observation block for 4 beds and 4 cots.
- (4) Laundry and disinfecting block fitted with a Washington-Lyon disinfecting apparatus.
- (5) Ambulance shed.

Staines Joint Hospital Board.—In 1908, after prolonged correspondence with each of the local authorities in the Staines Union, the County Council finally instructed me to report under section 6 of the Isolation Hospitals Act as to the need of hospital accommodation in this area. Upon this report it was decided to hold a local inquiry, and this took place at the end of July. Later in the year, as a result of this inquiry, the Committee reported to the Council that it was necessary to constitute a hospital district for the area, and eventually in 1909, an Order to this effect was made.

(b) The hospital accommodation for Smallpox.

The information given in last year's annual report is here brought up to date in so far as possible.

The following 14 districts have been combined into a Joint Hospital Board and have purchased an existing Smallpox Hospital situated in South Mimms, formerly known as Clare Hall Hospital. The constituent authorities are:—

Acton.	Hampton Wick.
Brentford.	Hanwell.
Chiswick.	Harrow.
Edmonton.	Southgate.
Enfield.	Tottenham.
Feltham.	Wealdstone.
Greenford.	Wood Green.

As regards the other districts, the provision is as set out in the Report for 1907, with the following exceptions :—

The Uxbridge Joint Hospital Board have obtained a site at Yeading in the district of Hayes. A loan for the purchase of this was granted by the Local Government Board, and the hospital buildings which were erected on the previous site were taken down and have now been re-erected on the new site.

The four districts in the Staines Union, viz., Staines Urban and Rural, Feltham and Sunbury are unprovided with hospital accommodation.

Cases removed to Hospital suffering from certain notifiable Infectious Diseases.

District.	NUMBER REMOVED.					NUMBER NOTIFIED.				
	Scarlet Fever.	Diphtheria.	Membranous Group.	Enteric.	Total.	Scarlet Fever.	Diphtheria.	Membranous Group.	Enteric.	Total.
URBAN.										
Acton	390	58	}	11	459	484	83	}	14	581
Brentford	39	8		—	47	42	26		2	70
Chiswick	69	19		2	90	89	32		5	126
Ealing (<i>Borough</i>)	77	29		2	108	108	43		5	156
Edmonton	275	124		24	423	308	158		36	502
Enfield	172	270		—	442	202	371		5	578
Feltham	—	—		—	—	4	9		—	13
Finchley	117	25		17	159	143	42		25	210
Friern Barnet	64	7		—	71	89	19		—	108
Greenford	—	—		—	—	—	—		—	—
Hampton	11	6	—	17	14	7	1	22		
Hampton Wick	2	1	—	3	3	3	—	6		
Hanwell	—	—	—	—	77	77	24	—	101	
Harrow	45	17	1	63	49	20	3	72		

Hayes	..	..	..	83	—	107	111	39	—	2	152
Hendon	..	..	..	71	23	106	98	45	—	6	149
Heston & Isleworth	..	..	..	164	31	216	239	93	—	9	241
Hornsey (<i>Borough</i>)	..	..	..	1	51	1	1	—	—	—	1
Kingsbury	..	..	..	1	—	2	2	1	—	—	3
Ruislip-Northwood	..	..	..	1	1	51	54	19	1	1	74
Southall-Norwood	..	..	..	36	14	163	185	48	—	—	223
Southgate	..	..	..	140	23	—	—	5	1	1	6
Staines	..	..	..	—	—	—	—	3	—	—	7
Sunbury	..	..	..	—	—	7	35	20	—	—	55
Teddington	..	..	..	5	2	679	718	148	24	24	890
Tottenham	..	..	..	572	95	70	72	16	1	1	89
Twickenham	..	..	..	69	—	31	23	4	3	3	30
Uxbridge	..	..	..	27	Not given	—	35	4	1	1	40
Wealdstone	..	..	..	—	4	—	4	—	—	—	4
Wembley	..	..	..	651	175	853	737	215	41	41	993
Willesden	..	..	..	100	39	140	146	69	7	7	222
Wood Green	..	..	..	—	—	—	—	—	—	—	—
RURAL.											
Hendon	..	..	..	12	12	25	18	13	3	3	34
South Mimms	..	..	..	—	—	—	12	15	—	—	27
Staines	..	..	..	—	—	—	84	42	2	2	128
Uxbridge	..	..	..	17	2	19	18	5	2	2	25

DISINFECTION.

The information as to the methods of disinfection in use in the various districts in the County has been brought up to date as far as possible, and is set out in the following table.

Dr. F. W. Andrew, medical officer of health of Hendon Urban District, reports that the Council has purchased a horse and van for ambulance work. This work was done previously by contract. The horse and van is used for the collection and return of infected bedding and clothing

In the case of Uxbridge Urban District, Dr. Lock states there is a steam disinfector at the Joint Fever Hospital, but the Council has not instructed its officers to make use of it. He states this should be done without further delay, as the arrangements at present in force are primitive and unsatisfactory.

With regard to Uxbridge Rural District, Dr. Charpentier states that for many years he has reported on the absence of proper disinfection. He now reports that a perfect system of steam disinfection has been inaugurated at the hospital which will be of the greatest use to the district.

Methods of Disinfection in Use.

District.	Rooms.	Articles of Clothing, Bedding, etc.	Remarks.
Acton ..	Sprayed with formalin and then fumigated for six hours with formalin	Steam disinfecting apparatus (Washington Lyon) at Isolation Hospital	Two vans, one for infected, other for disinfected articles.
Brentford ..	Infected rooms sprayed with formalin or disinfected with sulphur dioxide (SO ₂). Walls stripped and cleaned where necessary.		
Chiswick ..	Formaldehyde or sulphurous acid gas	,	
Ealing ..	No details given as to methods in practice	Steam disinfecting apparatus.	
Edmonton ..	Sprayed with formalin ..	,	Two transport vans.
Enfield ..	Sprayed with formalin and fumigated with formalin gas or sulphur	,	Ditto.
Feltham ..	Spraying and fumigation with formalin	No steam apparatus. Exposed in room during fumigation.	

Methods of Disinfection in Use—continued.

District.	Rooms.	Articles of Clothing, Bedding, etc.	Remarks.
Finchley ..	Spraying and fumigating with formalin. Walls stripped and cleaned, and the ceiling whitewashed, if necessary	Steam disinfecting appa- tus (Equifex).	
Friern Barnet..	Spraying with formalin and sulphur fumigation. Cleansing if necessary	Sent to Finchley.	
Greenford ..	.. ..	.. ..	It appears that disinfection is carried out by the Borough of Ealing.
Hampton ..	Fumigation with forma- lin, stripping and cleansing where neces- sary	Steam apparatus at Isola- tion Hospital.	
Hampton Wick	Fumigation with sulphur- ous acid gas	No disinfecting apparatus.	

Methods of Disinfection in Use—continued.

District.	Rooms.	Articles of Clothing, Bedding, etc.	Remarks.
Hanwell ..	Formalin spray ..	By arrangement with Ealing use of the steam apparatus here is avail- able when not in use.	
Harrow ..	Formalin spray and fumi- gation	Steam disinfecting appa- tus at Hospital.	
Hayes ..	Disinfection with formalin	No steam disinfecting apparatus.	
Hendon ..	Disinfection with formalin. Walls stripped and cleansed if necessary	Steam disinfecting appa- tus (Washington Lyon).	
Heston and Isleworth	No details given as to methods in practice	Steam disinfecting appa- tus.	
Hornsey ..	" Formalin spray and fumi- gation.	" No information given.	
Kingsbury ..	Cleansing of walls, &c., if necessary		

Methods of Disinfection in Use—continued

District.	Rooms.	Article of Clothing, Bedding, etc.	Remarks.
Ruislip- Northwood	Sprayed with 5 % solution of Lysoform, then fumi- gated with formalin	Steam disinfecter at the Isolation Hospital.	A covered van is sent for the infected articles and another light van is used to return the articles when disinfected.
Southall- Norwood	Fumigation with sulphur. Walls, floor, and ceiling are brushed over, and woodwork washed with solution of chloride of lime	Steam disinfecting appa- tus at Hospital (Thresh).	Two transport hand trucks. If case is treated at home the walls of rooms are stripped and scraped.
Southgate ..	Formalin spray and fumi- gation. Walls stripped and rooms washed	Steam disinfecting appa- tus at Hospital.	Two transport vans.
Staines (urban)	Fumigation with vapour of formaldehyde. The walls are stripped and re- papered in all cases	No steam disinfecting apparatus.	

Methods of Disinfection in Use—continued.

District.	Rooms.	Articles of Clothing, Bedding, etc.	Remarks.
Sunbury ..	Fumigation with formalin and sprayed with a Mackenzie spray.	No steam apparatus, sprayed with formalin.	
Teddington ..	Sprayed with formalin ..	No steam apparatus. Sprayed with Formalin or steeped in a solution of Jeyes' liquid.	
Tottenham ..	Rooms fumigated, stripped and cleansed	Steam disinfecting appa- tus provided.	
Twickenham ..	Rooms fumigated.. ..	No information.	
Uxbridge ..	Fumigation with formalin, stripping and cleansing where necessary	Steam disinfecting appar- atus at the Joint Fever Hospital, but the Council has not instructed its officers to make use of it.	
Wealdstone ..	Formalin spray and sulphur fumigation	Steam disinfecting appa- tus with formic aldehyde added.	

Methods of Disinfection in Use—continued

District.	Rooms.	Articles of Clothing, Bedding, etc.	Remarks.
Wembley ..	Formalin spray and formalin fumigation	Steam disinfecting apparatus in basement of office	
Willesden ..	Formalin spray	Steam disinfecting apparatus at Hospital	
Wood Green ..	Fumigation with formalin	Steam disinfecting apparatus.	
Hendon (rural) .	Formalin spray and formalin fumigation. Floors washed with Pynerozone	Sprayed with formalin and fumigated, or disinfected in steam apparatus at Hospital	Special bed van.
South Mimms (rural)	Rooms fumigated	No information.	
Staines (rural)..	Formalin fumigation (Ligner's apparatus)	No steam apparatus.	
Uxbridge (rural)	Sulphur fumigation and after smallpox formic-aldehyde fumigation as well	Steam disinfectors at Hospital	

HOUSING AND THE HOUSING OF THE WORKING
CLASSES ACTS.

A most noteworthy occurrence during the year under review in connection with this subject was the introduction by the Government of a Bill dealing with the law relating to housing. This Bill was discussed in Parliament and in Committee, but did not pass into law; it was, however, reintroduced into Parliament in the Session of 1909 practically in the form as amended by the Standing Committee of the House of Commons, by which it was considered during the Session of 1908.

The amended Bill, if carried into law during the present Session, will make important alterations in the law relating to housing and allied matters, and it will be well to give account of the more important provisions so far as they concern medical officers of health.

From this point of view the provisions may be briefly summarised as follows:—

The Bill consists of three parts, namely—

Part I, having as its object the amendment and improvement of existing housing law;

Part II, containing new powers as to Town Planning schemes;

Part III, making compulsory the appointment by County Councils of medical officers of health and providing for the duties of these officers and for the establishment by County Councils of Public Health and Housing Committees.

Part I (*a*) provides that Part III of the Housing of the Working Classes Act, 1890, which relates to the erection of dwellings for the working classes by local authorities, shall in future be in force in every urban and rural district, and the local authorities of such districts may, in connection with the exercise by them of these powers, be given by order of the Local Government Board, power to purchase land compulsorily, and may lay out and construct public roads and streets on any land acquired or appropriated for the purpose.

Under the Act of 1890, Part III was adoptive only, and, under the provisions of the Act of 1900, it could only be adopted in a rural district with the consent of the County Council.

(*b*) Gives power to the Local Government Board to enforce the execution by local authorities of Parts II and III of the principal Act, namely, the Housing of the Working Classes Act, 1890, and of improvement schemes under Part I of the same Act. County Councils are to be given power to act in default of rural district councils under Part III of the parent act.

(*c*) Requires that a landlord must not only let, as required by the Act of 1890, but must also maintain houses let to persons of the working class in habitable condition during their occupation.

(*d*) Makes important amendments in procedure as to closing orders and demolition orders. Local authorities would have the power of prohibiting the use of a house for habitation, and if after three months it is still unfit, of making a demolition order.

(e) Requires a local authority to make a quinquennial survey of every dwelling-house under a specified rateable value. In districts below a certain population at the date of the last census the local authority for this purpose would be the County Council.

Part II.—This portion deals with the subject of Town Planning and the preparation and approval of schemes having this object in view. A town planning scheme must be approved by the Local Government Board.

Part III.—Under this part of the Bill every County Council is required to appoint a medical officer of health, and the Local Government Board are given power to prescribe the duties of these officers.

Such officers are to have the same powers of entry as district medical officers of health.

The clerk of a district council is to be required to forward to the County medical officer of health information under Section 45 of the parent Act, and a district medical officer of health is to give him any information in his power and for the purpose of his duties.

A County Council is to be required to establish a public health and housing committee.

The proposals contained in this bill would make considerable alteration in the existing law, and would place local authorities in possession of increased and valuable powers. They would tend to remove many difficulties which arise in dealing with insanitary and dilapidated property, and the proposed powers would largely prevent the creation of insanitary areas in the future if fully enforced.

In the following account particulars are given of action taken in connection with housing matters in different parts of the County during 1908 in so far as this is referred to in the local reports. In the sanitary tables at the end of this report statistics will be found showing the amount of work carried out in each district by the sanitary officials during the year 1908.

Brentford.—Dr. Bott gives account of the action taken during the year in regard to the insanitary property in the district. It was stated in the last County report that Dr. Manby, a medical inspector of the Local Government Board, had in a published report animadverted on the existence of groups of insanitary property in the older part of the town near the vicinity of the High Street. The following are specifically referred to in Dr. Bott's report as having been dealt with during 1908.

Houses in Troy Town Passage, Back Lane, and Cromwell Place. These were the cause of legal proceedings, followed eventually by closing orders, and most of them were still unoccupied at the time of reporting. As regards three of the houses, the owner appealed to the High Court against the decision of the magistrates, but this was dismissed.

Houses in Harding's Court. These were in an extremely dilapidated and uninhabitable condition, and much overcrowded. Dr. Bott states that on communicating with the owner, the latter decided to close the premises, and they remain unoccupied.

Catherine Wheel Yard. Four houses here were reported on as unfit for habitation. The District Council communicated

with the owner, who closed the houses, and they remain unoccupied.

Two houses in High Street have been repaired, and are now occupied, whilst in the case of eight houses in Pottery Road and ten in Brook Road North, on the insanitary condition of which the medical officer of health reported, necessary works and repairs are to be carried out.

Dr. Bott, however, states that much more remains to be done, and adds—"There are scores of back to back houses
"very old and dilapidated which ought to be closed, some
"are built chiefly of wood, which are extremely dangerous
"in case of fire. The difficulty I find in dealing with any
"of these properties is the organised delay which is
"adopted."

If the Housing and Town Planning Bill referred to above should become law, the increased powers should assist the local authority in overcoming much of the difficulty experienced in their work of dealing with insanitary property in the district.

Chiswick.—The Chief Sanitary Inspector, Mr. Clark, reports that during the year 2,823 houses were visited in connection with systematic house-to-house inspection. This work has now been carried out for some years in Chiswick with, it is stated, very satisfactory results. Much work of a necessary and useful kind is effected in premises, and apparently without difficulty since it is usually done on the service of a preliminary notice, and the necessity for resorting to a statutory notice seldom arises. Under the by-laws in force in the district, a

large number of houses in the district have been improved by having that portion of the yard adjoining the house effectually paved.

The need for action under the Housing of the Working Classes Act did not arise during the year.

Ealing.—In this district 382 houses were visited in “house-to-house” inspection.

Edmonton.—By resolution of the local authority, the medical officer of health is required to certify under the provisions of the local by-laws, as to new streets and buildings (No. 113), that any new dwelling house is fit in every respect for human habitation. Dr. Lawrence reports that in this connection he visited 157 houses, making 183 inspections. Only one contravention of the by-laws was reported to the Committee as compared with seven in the previous year.

Under Section 32 of the Housing of the Working Classes Act, notices were served as regards three houses.

Feltham.—Very few houses have been erected. No action taken under the Housing Acts, but it is stated that house-to-house inspection is being steadily carried out, and 247 houses were visited.

Finchley.—Dr. Prior reports that the housing of the very poor is not an acute problem in the district. There is no lack of house accommodation for the well paid working man, and apparently this on the whole appears to meet the requirements of the district, although in some

instances the fact that some of the houses erected in recent years are occupied by members of more than one family, indicates that the rents in some cases are higher than can be paid by ordinary working men.

Hampton.—Dr. Tyndale expresses the opinion that the house accommodation is sufficient for the needs of the district. He states that the houses erected at Rose Hill Estate by the local authority under the Housing of the Working Classes Act, a few years ago, have been fully occupied. Sixty-five houses were visited in connection with house-to-house inspection.

Hampton Wick.—Two houses were found during the year in a state unfit for human habitation, one of these has been repaired and rendered fit, the other is still unoccupied. It does not appear that these were closed by a magistrate's order.

Hanwell.—Mr. Thomas, the Sanitary Inspector, reports that 843 houses were visited in house-to-house inspection. Of these it was found that 281 were each occupied by more than one family, and that the average number of persons per house was nine occupiers.

Harrow.—It is reported by Dr. Little that need for action under the Housing Act did not arise during the year. He states that married men with large families have difficulty in finding housing accommodation, and recommends the local authority to consider the desirability of providing accommodation which could be let at a moderate rent, to meet this difficulty.

Hayes.—In regard to this district, Dr. Higginson states that the housing accommodation is “still quite adequate to the demand,” but he is of opinion that “there would be a demand for cottages at a rental of 5s. to 6s. per week, if such could be built.”

Hendon (urban).—Many dwelling-houses, unfit for occupation were dealt with during the year under the provisions of the Public Health Act, but no proceedings were taken under the Housing Act.

It is reported that although the scheme for the erection at Child's Hill of houses for working men by the District Council was fully considered during the year, no material progress in carrying it out was made. Dr. Andrew expresses the opinion that houses suitable in structure and in amount of rent for the working class, if erected, would readily be occupied. Nearly 500 houses were built in the district during 1908, and over 400 were in course of erection at the end of the year, but apparently these did not include any of the class referred to above.

At the Hampstead Garden City, which is entirely within the area of the district, considerable progress was made during the year, and over 400 houses were either completed or in course of erection.

Southall-Norwood.—Dr. Windle draws attention to the fact that the majority of the houses are occupied by the working class. He states that the number of houses available is adequate, but that many are occupied by more than one family, owing to the rents being higher than can be paid by the poorer people. Much improvement is reported as to the condition of certain groups of houses which he animadverted upon in his report for 1903.

No proceedings under the Housing of the Working Classes Act were taken during 1908.

Southgate.—Dr. Ransome reports that the number of old insanitary cottages in the district is decreasing and good class houses are being erected. Two houses were closed by the owners at the request of the authority.

Staines (urban).—It is reported that the housing accommodation is adequate for the needs of the district.

Sunbury.—Dr. Byham writes that the majority of the houses of the poorer class are provided with ample open space in the rear and with through ventilation, and that back to back houses are quite the exception.

Teddington.—In last year's report reference was made to the fact that sanction had been given by the Local Government Board to a loan for the erection of working class dwellings. No comment is made as to this in the report of the district for 1908.

Wealdstone.—Whilst it appears from the annual report that there is ample housing accommodation in the district, it is reported that the high rents have led to sub-letting, tending to overcrowding, and to the erection of flats. It has been possible to devote more attention to houses occupied by the poorer class since assistance was given to the sanitary inspector, and as a result, nearly 500 house-to-house inspections were made during the year. No premises were closed as being unfit for human habitation.

Wembley.—Dr. Goddard reports that the district is adequately provided with houses for the working class and that there is no need for the erection of these under the provisions of the Housing Acts. One hundred and fifty house-to-house inspections were made in 1908.

Willesden.—In tables which have been got out for the purpose of showing the influence of social status upon the health of the community, Dr. Wm. Butler has taken three classes, viz. :—

- (1) Streets with houses of rentals over £50 per annum, usually occupied by one family each.
- (2) Streets with houses of rentals between £30 to £50 per annum, usually occupied by not more than two families.
- (3) Streets with houses of less than £30 per annum occupied in tenements of one to four rooms.

He states that, in (1) about 11 per cent., in (2) about 43 per cent, and in (3) about 45 per cent. of the population are respectively housed. In the first there are about five persons, in the second about six persons and in the third about eight persons on an average in each house.

Rural Districts.—In none of the reports of the four rural districts, namely: Hendon, South Mimms, Staines or Uxbridge, is it stated that want of houses is badly felt by the working class, but in the case of Uxbridge, Dr. Charpentier repeats his statement of the previous year as to the difficulty experienced in dealing with old cottages which are not capable of repair and which should therefore be closed. He states that owing to the scarcity of cheap

cottage accommodation he is prevented from advising closure, if the existing houses are in any degree habitable.

In the case of Staines, Dr. Morris reports that eleven houses at Ashford Common were closed by an order under the Housing Act. About 94 new houses were built during the year, chiefly in the parishes of Ashford, Shepperton and Harlington, in the last mentioned near to Hayes railway station. He states that since the appointment of the two new sanitary inspectors, the system of house-to-house inspection of the district recommended by Dr. Manby in his report to the Local Government Board has been carried out, and over 1,500 such inspections had been made up to the end of the year.

TENEMENT HOUSES OR HOUSES LET IN LODGINGS.
OVERCROWDING.

There is little to state as regards houses of this class, as few comments are made in the district reports. On examination of the table given later in this report (Adoptive Acts and By-laws) as to the by-laws which are in force in the County, it will be seen that rather more than half the total number of local authorities in the area have already made such by-laws. In the absence of comment on this class of premises or of action taken under the by-laws it is to be presumed that the need for such action is not felt to arise.

It is stated that the District Council of Wood Green have drafted by-laws and forwarded them to the Local Government Board for their approval.

It appears from the returns supplied with the annual reports for 1908 that the number of houses which have been registered under the by-laws are as follows :—

Chiswick, 341.

Harrow, 3. From this district six contraventions of the by-laws are reported.

Heston and Isleworth, 1. Twenty-four contraventions of the by-laws reported.

Southall-Norwood, 16. No contraventions of the by-laws came under notice.

Tottenham, 12.

Uxbridge (urban). Dr. Lock reports that the Council have not taken into consideration his recommendation to adopt by-laws for regulating houses let in lodgings.

Overcrowding.—The cases of overcrowding which were found and which were abated during 1908 numbered 342. The numbers in the three preceding years were :—

In 1907	..	..	..	..	289
In 1906	..	..	..	..	292
In 1905	..	..	..	..	234

COMMON LODGING-HOUSES.

The number of premises of this class registered in the county is not large. Such as there exist are to be found in those districts adjoining London and near to the main routes from other parts of the country which are likely to be used by persons of the vagrant class.

The total number registered is 35, and as regards these 21 contraventions of the by-laws were dealt with during

the year. Some 500 inspections of the premises are reported.

The districts in which these common lodging-houses are situated are as follows:—

Acton 2	Heston and Isleworth 2
Brentford 7	Staines (urban) .. 1
Edmonton 1	Tottenham 5
Hampton Wick .. 2	Uxbridge (urban) .. 12
Harrow 1	Willesden 2

MOVABLE DWELLINGS, CARAVANS, TENTS, ETC.

The total number of this class of habitation which during 1908 called for observation and inspection by the sanitary officials of the various local authorities was 1,672.

As usual, the greater number are reported from the east and north-east parts of the County. Thus, from Edmonton 668, Tottenham 200, Southgate 158, Hendon (rural) 103, Enfield 42, are reported. In other parts the greater number are from Heston and Isleworth 101, and Brentford 43.

The question of dealing with persons of the class living in this kind of dwelling has been one of much difficulty in the area forming outer London and its vicinity in past years, and has in some districts involved much of the time of the local officials.

Additional powers for dealing with the matter were obtained by the County Council of Middlesex in their General Powers Act, 1906, Section 34. Special by-laws were granted by the Home Office to some of the district councils in the County previous to the passing of this

Act. A list of the latter authorities is given in last year's report, as well as a list of those districts in which Section 34 of the Middlesex General Powers Act, 1906, is in force. Since the date of that report Heston and Isleworth and Hampton have been included amongst the areas in which this section is in force. The different districts and the dates when the section was made applicable to them are as follows:—

Friern Barnet	..	..	December, 1906.
Greenford	..	..	" "
Hanwell ..	..	..	February, 1907.
Wood Green	..	..	April, 1907.
Southall-Norwood	..	..	December, 1907.
Chiswick ..	..	..	January, 1908.
Heston and Isleworth	..	..	February, 1909.
Hampton	..	..	June, 1909.

I quote the substance of the remarks made in the district reports on the subject:—

Chiswick.—Owing to complaints as to gipsy encampments the district council adopted by-laws as to tents and vans, and also applied to the County Council to make applicable in the district Section 34 of the General Powers Act.

Edmonton.—The Chief Inspector states that on several occasions vans had to be removed by the sanitary authority. Several summonses were issued and the owners were fined the full penalty; but in the meantime the owners moved away, only to return under assumed names. The sanitary inspector adds that it is no uncommon thing to find as many as 20 vans and tents together on one site, without water supply or sanitary convenience of any kind,

and that wherever they camp the fences of the land soon disappear. He suggests that all owners of vans should be registered and compelled to affix a registered number on the vans, as in the case of canal boats, with a view to preventing them from evading the law.

Southall-Norwood.—In 20 instances nuisances were found in connection with movable dwellings. One case of infectious disease occurred in a van which had just come into the district, and was removed to hospital. Much difficulty is caused in dealing with this class of the population.

Tottenham.—The medical officer of health reports that gipsy encampments now only take place in one part of the district, namely, Devonshire Hill, near which there are few inhabited houses.

Willesden.—In the section dealing with enteric fever the circumstances of a case of illness from this disease, in the person of a caravan dweller, have been quoted. Dr. Butler expresses the opinion that need exists for greater powers of control over this form of dwelling.

Hendon (rural).—It is reported that less difficulty was experienced than in 1907 in dealing with gipsy encampments. Harrow Weald is specially frequented by these vagrants.

Staines (rural).—The local authority took proceedings against gipsies occupying sheds on plots of land near Ashford Common, which were found to be overcrowded and inadequately supplied with sanitary accommodation. An order was made by the magistrates prohibiting the use of the sheds for human habitation.

CANAL BOATS USED AS DWELLINGS.

Brentford.—The sanitary inspector reports that 65 canal boats were examined during the year. There were 312 canal boats registered, and nine contraventions of regulations were discovered.

One case of scarlet fever was notified in the person of the master of a barge. He was removed to hospital, and the barge and bedding were disinfected. No extension of the disease took place, although the patient was in the "peeling" stage at the time of removal, and there were three other occupants of the barge.

Edmonton.—Thirty-three boats were inspected, and four contraventions were found, all of which were remedied.

The canal is situated on the outskirts of the district.

Hanwell.—There is only one stopping-place on the canal in the district, viz., Macklin's Dock. Frequent visits were made by the inspector and 14 canal boats were inspected.

These boats were used for the carrying of bricks. No cases of infectious disease were notified of persons living on boats.

Four infringements were discovered.

Heston and Isleworth.—Dr. Steegmann reports that 46 contraventions of regulations were found. He states it is easier to discover defects or contraventions than to get them remedied, as there is no power to keep a boat in the district till a notice can be served or a defect made good.

Southall & Norwood.—The boats inspected during the year numbered 71, and ten boats with infringements were found.

Of the infringements nine were remedied. The inspector reports that no case of infectious disease occurred, and that the general cleanliness of the boats (with very few exceptions) was very satisfactory.

Thirty-six boats were worked by men only, and 35 boats had women and children on board.

Uxbridge (urban).—Eight canal boats were registered under the Act, and 12 infringements of regulations were discovered.

Wembley.—Dr. Goddard reports—"We sometimes board and inspect the canal boats passing through our district, and point out all defects."

One infringement was found.

Willesden.—Seventeen contraventions of regulations were reported.

SEWERAGE AND SEWAGE DISPOSAL.

An indication of the growth of the population of the County is seen in the extensions and alterations which, in the last few years, have had to be made at the sewage outfall works of several of the different districts.

During the last five years, applications for the sanction of loans for the improvement or extension of works have been made to the Local Government Board by the following local authorities:—Ealing, Chiswick, Edmonton, Harrow, Willesden, Hampton Wick, Hornsey, Twickenham, Enfield, Hayes, Kingsbury, Hendon (urban and rural), Friern Barnet, Finchley, Ruislip-Northwood, Wealdstone, Hanwell, Brentford, Wembley and Staines (urban).

In the case of Willesden and Acton, arrangements have been made, and in the latter case the necessary alterations and construction of new sewers are now completed, whereby the sewage will be taken into the metropolitan system of sewers under the London County Council.

In the greater part of the county there now exist systems of main sewerage. Thus all the urban districts except Feltham and Greenford are so provided, and in the case of the four rural areas, all the parishes in Hendon (rural) and the two parishes in South Mimms are sewered. In Uxbridge (rural) most of the parishes have main sewers.

In Staines (rural) no systems of main sewerage exist for any of the more populous parts.

In most districts the various systems consist of separate sewers for the foul sewage, the surface water being carried by other sewers to the brooks in the respective areas.

The more important comments on this subject in the district reports are as follows :—

Acton.—In previous annual reports Dr. Thomas has given account of the alterations which were being made in the main sewerage of the district, and which had for their object the discharge of the sewage of Acton into the Metropolitan main drainage system. Power for effecting this had been obtained in the Acton Sewage Act of 1905. He now reports that the work is completed. Under the Act referred to the amount of sewage to be discharged into the London system is fixed at an average of 50 gallons per head per diem, and a maximum rate of flow of 100 gallons in 24 hours. Storm water is not

to be discharged into the London sewers, but may be discharged into the River Thames, provided that a flow up to 125 gallons per head per diem is screened and passed through filter beds 4 feet in depth and $2\frac{3}{4}$ acres in area. This will be done at the old sewage works.

It will be seen in the sanitary tables at the end of this report that much work and improvement in house drains were effected during the year. Three cesspools were abolished and the houses connected with the sewers.

Brentford.—Reference is not made to the method of sewage treatment. Mr. Coleman, the sanitary inspector, states that the drains of 50 premises were reconstructed under his supervision. In several cases where the drain passes under the house iron pipes were used. The drains are subjected to the water test.

Chiswick.—No account is given as to sewage disposal. The chief sanitary inspector reports as to difficulties and delay which arise in dealing with cases of combined drainage; several instances are quoted, and in two the district council had to contribute towards the expense of the necessary alterations.

Ealing.—Dr. Patten writes that the method of treating sewage which has now been in force for many years continues to be a success.

Edmonton and Southgate.—The foul sewage of these two districts is dealt with on a sewage farm of 235 acres by means of broad irrigation. Surface water is conveyed to Pymmes and Salmons Brooks. Dr. Lawrence states that during 1908 the local authority carried out improvements

at the sewage farm and that the greater part of the land was "steam-ploughed and cultivated so as to freshen the ground and improve its filtering capacity." He adds that it is recognised that "in consequence of the growth of our population, and especially that of Southgate, some supplementary scheme will have to be introduced in the near future," and that negotiations are taking place with a view to the sewage of Edmonton, Southgate and Enfield in Middlesex, together with that of Leyton and Walthamstow, being taken into the metropolitan system.

Enfield.—In this report but brief mention is made of the subject of sewerage and sewage disposal. It is stated that an additional filter bed 100 feet in diameter is to be constructed, and that a new surface water drain for a portion of Ponders End and a new culvert, which will accelerate the flow of storm water, is nearing completion in Cecil Road, Sarnesfield Road, Church Street and Little Park.

Feltham.—In the County report for 1905 I stated that during that year the question of the need of a main drainage scheme for this district had been the subject of correspondence between the County Council and the (then newly-constituted) urban district council, and that the surveyor of the latter body had been instructed to report on the matter. In 1906 it was reported that the question was under consideration, and from Dr. Morris' report for 1907 it appeared that during that year the authority had considered plans for a main drainage scheme submitted by the Liernur Syndicate. These do not appear to have commended themselves to the district council, as Dr. Morris now reports (1908) that a consulting engineer

had been engaged to report as to the most suitable scheme for the area. His report has been presented and is under consideration.

In connection with this district it should be stated that Dr. Manby, one of the medical inspectors of the Local Government Board, inspected the district in 1907 and in his report he recommended that the district council "should press forward a suitable drainage scheme."

Finchley.—Further extension of the new works, described in previous reports, has been considered and decided on, and application has been made for sanction to the necessary expenditure.

Friern Barnet.—At the sewage disposal works the construction of two additional filters and a settling tank was commenced during the year. These Dr. Sprent reports have long been required. The method of treatment in use appears to be similar to that set out in the County report for 1904, viz., the sewage, after mixture with lime (4 grains per gallon) and alumino-ferric (1 grain to the gallon), is passed on to settling tanks. The overflow from these passes first on to "contact" beds and then into filter beds, the effluent from which is discharged into a local brook. The sludge is dealt with on land.

The sewerage of the district is on the dual system, but in the case of some of the older houses, the surface water discharges into the foul sewers. This is being altered as opportunity arises.

Hampton Wick.—Complaint arose during the year in reference to the method of sewage disposal of a house in

one part of the district. The use of the cesspool has now been discontinued, and the house has been connected to a sewer belonging to the Hampton district council. Over 98 per cent. of the houses drain into the public sewers.

Harrow.—Dr. Fletcher Little reports as regards the sewage farms, that the effluents from them have been of a satisfactory character. It appears also that some alteration has been carried out at the sewage farm at Newton, as he states that “the new field at Newton has been dug over, and about 1,000 loads of ashes mixed with the soil.” It would be interesting, if in next year’s report, account were given of the sewage disposal works in their existing condition.

Hayes.—The method of dealing with sewage at the new outfall works for this district is stated to be by sedimentation tanks, contact beds, and land treatment. Over 500 houses now drain into the sewers, but there are 143 houses in the area in which sewers are constructed which are not yet connected to them. In the parts of the parish where sewers are not yet constructed cesspool drainage is in force. There are 141 houses in the latter area. All new drainage work is tested by the water test, and plans are submitted and records kept of them.

Hendon (urban).—Account has previously been given of the outfall works, but as certain alterations and additions have been made, it will be well, briefly, to set out the present means of sewage disposal. The works are situated at Renters Lane, and all the sewage gravitates to them, with the exception of that from a small part which has to be pumped. The works cover 72 acres of ground.

The process of purification is as follows :—

- (1) Precipitation in settling tanks, aided by the addition of sulphate of soda.
- (2) Passage of the effluent from the tanks to high level filters which have recently been reconstructed. These contain screened burnt ballast, 4–5 feet deep, and they are under-drained and ventilated. There are six filters, of a total area of $3\frac{1}{2}$ acres.
- (3) The filtrate from the above is passed through other filters at a lower level, made up of clean broken bricks, burnt ballast, coke clinker, and pea gravel from below upwards. The filtering material is 5 feet deep, and the total area is 5,600 yards super.

The sludge is pumped on to the land and dug in.

Besides the filters mentioned above 18 acres of land are available for irrigation purposes.

Application has been made to the Local Government Board for a loan for the further construction of bacterial filters, the need for which arises largely owing to the rapid increase in erection of houses in the district.

Kingsbury.—The additional two acres of land referred to in last year's report have now been prepared and are in use for sewage disposal.

Ruislip-Northwood.—The need for alteration and improvement at the outfall works led the district council to obtain the advice of Mr. Howard Humphreys in 1907. After consideration of his report application for sanction to a loan was made to the Local Government Board. This

being granted reconstruction was commenced, and at the end of 1908 the work was nearing completion. The alterations and additions in connection with the outfall works are described by Dr. Hignett, and comprise the following:—New pumping engines, viz., Teasdale Oil Engines, have been provided at Eastcote and Ruislip, together with new pumps. Two of the old septic tanks have been converted into equalising chambers, and the remaining tanks have been converted into a single sedimentation tank which is provided with a helical sludge scraper. After passing through the last-mentioned tank the sewage flows into two newly-constructed septic tanks. From these the sewage flows into contact beds, which existed previous to the reconstruction; but in order to make them as effective as possible, a mechanical washer has been provided and the clinker in the beds has been thoroughly washed. The effluent from these beds is then passed through percolating filters which have been added to the works. There are three of these, circular in form, and provided with mechanical distributors—two with Candy-Whittaker sprinklers and one with a Fiddian sprinkler. The effluent then passes through a Dortmund tank, whence the effluent discharges into a brook joining the River Pinn. The sludge is dealt with in trenches on the land. Storm water can be dealt with on part of the land,

Nearly all the houses in Northwood are now connected with the sewers, and during the year 20 disused cesspools have been filled in.

Southall-Norwood.—The need of extension of the existing works was referred to in the report of 1907, and Dr. Windle

again writes that owing to the growth of the district this need is urgent and is under the consideration of the surveyor.

Staines (urban).—It is reported that a loan has been obtained, with a view to extension of the filter area at the outfall works. During the year the use of four cesspools was discontinued and the houses connected to the sewers, one was reconstructed and six were emptied.

Sunbury.—The sewage farm in this district is situated on a porous gravel soil, and the sewage is dealt with by means of broad irrigation on the land. There is apparently no effluent outlet. Dr. Byham writes that no complaints have reached him.

Teddington.—The sewage works of this district were completed in 1890. The increase in the district since then necessitates extension and alteration, and this need has, it is reported, been accentuated by a breakdown in the pumping machinery. A scheme has been adopted, and it has been decided to apply for sanction to a loan for carrying it out. The scheme includes (1) the provision of additional pumping plant, (2) the provision of new furnaces which are to be constructed so as to effect the destruction of refuse, (3) the construction of detritus chambers and sedimentation tanks, (4) contact filters.

Ten cesspools have been abolished during the year.

Tottenham.—The sewage of this district discharges into the Metropolitan system. Recent alterations in the sewerage have been set out in previous reports.

Twickenham.—The alteration at the outfall works were briefly set out in the County report for 1907.

Uxbridge (urban).—The method of purification at the outfall works is (1) by sedimentation, (2) by passing the sewage, after sedimentation, through filter beds consisting of slag and coke. It is not stated whether these are contact beds or percolating filters. The effluent from them is discharged into the river. The sludge from the sedimentation tanks is dealt with in trenches on the land, and when dry is carted away.

During the year the use of sixteen cesspools was discontinued.

Wealdstone.—In this district the sewage is purified by (1) sedimentation in open tanks, (2) passage of the sewage from (1) through filter beds of clinkers, but it is not stated if these are contact or percolating filters, (3) and finally by land treatment of the effluent from the filter beds. Dr. G. Butler reports that owing to increase in the volume of sewage to be dealt with, extension of the works has become necessary, and with this in view application for a loan was made to the Local Government Board towards the end of 1908. The proposed extensions and improvements have been got out by the Surveyor, and in addition to enlargement of the outfall sewer, and an increase of 11 acres to the existing area of the works, the scheme comprises the following:—

For the north part of the district, screening and grit chambers in duplicate, two sedimentation tanks and three new filter beds. For the south part of the district, a new

septic tank and seven new filter beds. The sewage from these works will then be passed over the land.

For dealing with storm water the existing filters will be reconstructed and a new filter will be added.

The estimated cost of the works proposed is £12,573.

Wembley.—Dr. Goddard reports that new filters for dealing with storm water have been added, and that additional works are about to be undertaken.

Willesden.—The sewage of what is known as the “Brent area” of the district, at present dealt with at sewage works in the district, is to be discharged into the metropolitan system as soon as the construction of the connecting sewers is completed.

Staines (rural).—It does not appear in the report on this district that any main drainage works exist, but as regards the village of Sipson, Dr. Morris states that plans of a drainage scheme have been under consideration for some time. Owing to the presence of a large piggery in the village, the drainage from which passes into the existing sewer, the sewage is concentrated to an extent which renders purification difficult. Dr. Morris reports that the present conditions are a source of considerable nuisance.

At Hanworth a surface water drain has been relaid, and this, it is expected, will prevent flooding of a large area.

WATER SUPPLY.

In the report of 1907 a detailed account was given of the various authorities or companies which supply water in the area of the County, together with a table, based

upon information supplied by the local medical officers of health, showing in which parishes the various public supplies were available, and to what extent houses depended upon local wells for their supply.

From the information then obtained, it appeared that practically the whole area of the County is supplied with water from one or other public source, although there are still separate houses or groups of houses in parts at a distance from the more populous areas which derive water from wells.

The public sources of water supply are the following :—

Public Authorities.

The Metropolitan Water Board.

The Uxbridge Urban District Council.

Public Companies.

The Barnet Water Company.

The Colne Valley Water Company.

The Rickmansworth and Uxbridge Valley Water Company.

The Slough Water Company.

The South-West Suburban Water Company.

The West Surrey Water Company.

In view of the information set out in last year's report, it is only necessary here to refer to those districts in the reports relating to which specific reference is made on the subject of the water supply.

In the sanitary tables at the end of the report, information is given as to the number of houses on the public supply, as to whether the supply is constant or intermittent, and as to other details concerning the water service.

Chiswick.—The chief sanitary inspector states that all houses are supplied with water by the Metropolitan Water Board, except two houses at Strand-on-the-Green. These have wells.

Enfield.—The medical officer of health states that there are still some private surface wells in use. Samples of water from eight of these were examined, and in the case of three the water was found to be unfit for drinking purposes. Steps have been taken to get the public supply laid on to the houses.

Feltham.—The need of providing a public water supply to Ashford Clumps by extension of the Water Company's mains is referred to, and was under consideration during the year. Dr. Morris states that some wells "have been condemned, and if after they are cleaned out," the result of analysis is still unsatisfactory, a supply from the Water Company is usually laid on.

Friern Barnet.—It is reported that a constant supply is available throughout the district.

Hampton Wick.—All houses are supplied with water by the Metropolitan Water Board, except a few cottages, chiefly in Home and Bushy Parks. One well was closed during 1908.

Hayes.—Ninety-five per cent. of the houses are supplied by the Rickmansworth and Uxbridge Valley Company. Mr. Dudley Lewis, the clerk of the district council, informs me that this company supply in that part of the district west of Yeading Lane and Coldharbour Lane, and "that if any houses between this and Hayes Bridge are supplied

with company's water, it will probably be that of the South-West Suburban Company." This, it appears, would not relate to more than one or two houses; others get their water from wells.

Ruislip-Northwood.—This district may be considered as regard three areas: (a) Northwood. Here a constant service, supplied by the Colne Valley Water Company, is available, except in Jackets Lane and part of Ducks Hill. (b) Eastcote. The mains of above company are laid through a considerable part. (c) Ruislip. The above company supply the village and main roads. There is a deep well in the village, the water of which is satisfactory and is used by several cottages.

In the last two areas, Dr. Hignett states there are several shallow wells, the surroundings of which render the water liable to suspicion. Two wells were closed in 1908.

Southall-Norwood.—Supplied by South-West Suburban Water Company. Dr. Windle reports that the quality of the water supply during 1908 has been good. This company applied to Parliament during the year for additional powers, and sanction to raise more capital. The district council opposed the Bill, and obtained the insertion by the Parliamentary Committee of clauses for the protection of the district. These are set out at length in Dr. Windle's report.

Polluted wells at Buckingham Terrace and Top Locks have been condemned, and the public water supply has been laid on to all houses in this area except six.

Southgate.—There are ten wells in the district, the water of which is used for drinking purposes. In five cases water was analysed and two wells were subsequently closed.

Teddington.—One well was closed, as the water was found to be unfit for domestic use.

Uxbridge (urban).—Owing to difficulty with the pumping apparatus at the water works, the public supply had to be supplemented at times by water from the Rickmansworth and Uxbridge Valley Water Company.

Staines (rural).—Extension of public sources of water supply took place in Shepperton and Stanwell parishes. The hamlet of Poyle, as regards which, difficulty in obtaining a public supply has been experienced, is now supplied by the Slough Water Company. The mains of this company, which does not supply in any other part of the County, being nearer to Poyle than those of the South-West Suburban Company within whose area Poyle is situated, arrangement has been come to between the two companies whereby the former have power to supply within a prescribed area.

Dr. Morris states that there are still a large number of surface wells upon which scattered cottages in parts of the district where water mains do not exist, depend for their water supply.

DAIRIES, COWSHEDS, AND MILKSHOPS.

In each of the County reports since 1904, I have dealt in considerable detail with the subject of the milk supply of the County, and with such powers as are possessed by the

local authorities, under the Dairies, Cowsheds and Milkshops Orders, viz., the borough and district councils, for safeguarding it. Reference has also been made to the reports which have been issued by a Royal Commission on the subject of the relationship of human and bovine tuberculosis. That the existing powers in regard to milk, and the method in which these powers are enforced throughout the country, are inadequate for insuring a supply which shall be above suspicion, there can, I think—in the light of the reports of the Royal Commission referred to—be but little doubt, and the need for more stringent control is indicated by the fact that it was proposed by the Government to bring in during the Session of 1908 a Bill dealing with the milk supply of the country. In the case of Middlesex a considerable part of the milk consumed by residents comes from distant parts of the country, and the necessity of effective control being practised by authorities, not only in the County but elsewhere, is a matter of importance.

A few years back, regulations under the Dairies, Cowsheds and Milkshops Orders had not been adopted throughout the County, but now these are in force in all districts. The majority are based upon the last issued model regulations, but in one instance, viz., Hendon urban, new regulations were adopted in 1908, and in these attempt has been made to word the requirements more precisely than is the case in the model regulations.

In October, 1908, I reported on the subject of a letter which was received from the London County Council, drawing attention to the powers possessed by them under the London County Council (General Powers) Act, 1907, in

regard to tuberculous milk derived from cows in districts outside, but the milk from which was sent into London. Briefly, these powers are to the effect that on the discovery of such milk the officers of the London County Council have power to visit and make a veterinary examination of cows in a farm situated in a district outside London, and if a cow is found to be suffering from tuberculous disease of the udder, to prohibit the supply of milk from the cow within the area under the jurisdiction of the London County Council.

Under Section 25 (3) of the Act referred to, it is provided that if the medical officer of health of the County of London finds it necessary to enter and inspect the cows in a dairy situated outside London, he "shall in all cases, where reasonably practicable, without involving delay in the exercise of the powers of this section, give to the medical officer of the County in which the dairy is situate previous notice in writing."

If an order is made by the London County Council prohibiting the supply of milk within London, the London County Council is required by Section 25 (5) to serve notice of the facts on the Council of the County in which the dairy is situated, as well as on the district council, whilst by Section 25 (10) they are required to furnish to the County Council of the area in which the dairy is situated a copy of the report made by the medical officer and the veterinary surgeon as the result of their inspection.

The letter from the clerk of the London County Council enclosed a copy of a letter sent by him to district councils, as the authorities under the Dairies, Cowsheds and Milkshops Orders, in which information was asked for as to

whether cows within the respective districts were subject to veterinary examination for the purposes of the Orders, and, if so, how frequently.

The subject of such examination is one which I brought to the notice of the Committee in 1906, and I was then instructed to write to all the medical officers of health in the County, inquiring whether the respective district councils had made any systematic arrangements for the examination of cows under the Dairies, Cowsheds, and Milkshops Order of 1899. At that date it was found that only a few of these local authorities had made such arrangements. In view of the action by the London County Council, it was decided to inquire again of these authorities what action was now being taken, and a circular letter was sent to each district asking for information. In this letter attention was specially directed to the circular, dated 11th March, 1899, from the Local Government Board to local authorities on the subject of the Dairies, Cowsheds and Milkshops Orders, in which it is stated, in reference to tuberculous disease of the cow's udder, "that the Board think that it will be competent for the Council to employ and pay a veterinary surgeon with a view to obtaining the certificate under the Article as amended, or to appoint him as an officer for this purpose, if they think fit to do so."

The effect of the replies received from the district councils may be summarised as follows:—

- (a) Eight district councils replied that examination on their behalf was made by veterinary surgeons of the milch cows in their area for the purposes of the Dairies, Cowsheds and Milkshops Order,

1899. In the case of 5 of these, the examination is made periodically; in the case of the other 3 authorities, it is apparently made when for some reason it is thought necessary so to do.

The districts included in the above are :—

Periodic Examination. Examination when necessary.

Hampton Wick.	Ruislip-Northwood.
Staines (urban).	Willesden.
Teddington.	Hendon (rural).†
Twickenham.	
Uxbridge (urban).	

(b) In one district, viz., Brentford, the district council decided to have the milch cows examined by a veterinary surgeon at least once a quarter.

(c) In three districts, viz., Enfield, Finchley, and Hampton, the replies stated that the subject was under consideration.

(d) In one district, viz., Feltham, there are no cows in the district.

(e) In the remaining 23 districts, veterinary examination of cows is not made on behalf of the local authorities. These include some of the districts with the largest number of milch cows in the County. I may remark here that the medical officer of health of South Mimms has in each of his reports for several years past recommended that the services of a veterinary surgeon should be requisitioned when necessary.

In the reply from Edmonton it was suggested that the examination should be made by the veterinary surgeons appointed by the County Council under the Contagious Diseases (Animals) Act. The examination in question, however, has to be made for the purpose of the Dairies, Cowsheds and Milkshops Orders, as regards which the County Council have, as I understand it, no power, the local authorities under these Orders being the urban and rural district councils. I take it, therefore, that without further legislation the County Council could not take the action suggested.

One of the difficulties which is felt by a district council in taking steps for the discovery of tuberculous disease of the udder in the cows in their districts, is indicated in the reply from Southgate, in which it is stated that the local authority is willing to take action in the matter, "but they feel that steps should be taken to ensure that the like action be taken in every district in this County, and that, failing this, the work should be undertaken by the County Council." In the reply from Hayes a similar opinion is expressed, whilst in the reply from Harrow it is stated that a decision has been deferred pending legislation on the subject.

Several of the larger districts in Middlesex have, under local acts, granted during recent years, supplemented their powers under the Dairies, Cowsheds and Milkshop Orders, for discovering and dealing with milk derived from tuberculous cows. These special powers relate not only to milk supplied from cows *within* their districts, but also to

that supplied from cows kept *outside* the districts. The powers, generally speaking, are on similar lines to those now possessed by the London County Council.

In the replies referred to above, sent by the district authorities in answer to the Council's letter, no information was given as to what, if any, definite action had been taken by those authorities having these additional powers to put them in force; but in the case of Finchley, who only obtained the powers in the recent session of Parliament, and in the case of one other district, the subject of their enforcement was said to be under consideration.

The conditions of milk supply of a large part of Middlesex are practically the same as those which apply in London, and there is no doubt that a considerable proportion of milk sent up to the metropolis from distant parts of the country is consumed in Middlesex. This raises the question whether milk which under the new powers of the London County Council may be prohibited from being supplied to the County of London may not in the future be sent into those parts of the metropolitan area situated in Middlesex, in the absence of power to prohibit it, or owing to the fact that where such powers exist under some local act, they are not being enforced as rigorously as in London. I think that in a county such as Middlesex action as to tuberculous milk could probably be taken more readily and economically by a single authority such as the County Council, who, acting for the whole area, are in a better position for appointing officers specially for the purpose, than if the work is carried out separately by each district authority.

After consideration of the replies received from the district councils the committee reported on the matter to County Council and a letter was sent to the Local Government Board forwarding a copy of the report.

The more important remarks made in the annual reports of the districts this year are as follows :—

Brentford.—The sanitary inspector states that proceedings were successfully taken against a purveyor of milk for having failed to register. In three instances improvements at two dairies and one cowshed, to comply with the Dairies, Cowsheds and Milkshops Orders, were carried out.

Chiswick.—It is reported that in this district there are but two cowsheds, with only four cows in each, so that obviously in this case the authority have no direct control at its source of most of the milk consumed by the residents. Fifteen of the premises at which milk is sold are said to be specially well constructed for the sale of milk, and the owners take all necessary precautions to prevent contamination of milk, but in addition to these there are some twenty general shops, in which milk is sold, which are not well adapted for the purpose.

Ealing.—Dr. Patten reports that about 93 per cent. of the milk supply comes from outside sources.

Enfield.—There are 37 cowshed premises in the district. These, together with the milkshop premises, it is reported, are regularly inspected.

Finchley.—Dr. Prior reports that the number of milch cows in the district is steadily diminishing, and that an increasing amount of the milk supply comes from without. In 1908 the district council applied to Parliament for, and obtained, additional powers to control the supply, and in order to carry out these powers a veterinary surgeon was appointed in December, 1908.

A summary of the powers obtained is given in the report.

Friern Barnet.—The importance of the grooming of cows and the desirability of milkers wearing clean overalls at the time of, and of washing their hands before, milking is impressed upon cowkeepers.

Greenford.—There are seven cowsheds registered here, housing 256 milch cows. Dr. Hope states that the premises are old, structurally deficient and badly lighted, and that to put them into a sanitary condition in compliance with the terms of the regulations would involve considerable outlay. In several cowsheds the water supply is not satisfactory and adequate provision for cleansing utensils and for milkers to wash their hands is wanting.

It appears that they were the subject of special report by the medical officer of health during the year, and he recommends the rigid enforcement of the regulations.

Most of the milk produced is sent to other districts.

Hampton.—Premises are reported as in satisfactory condition. A veterinary surgeon has been employed to examine cows once a quarter.

Hampton Wick.—There are only twelve milch cows in this district, and their condition is periodically reported on to the local authority by a veterinary surgeon.

Harrow.—Dr. Fletcher Little recommends his authority to employ a veterinary surgeon to examine cows. He narrates the fact that at one dairy farm, owing to an accident, one cow had to be killed. The carcass was found to be tuberculous, but there was no evidence of tuberculosis of the udder.

Hendon (urban).—New regulations came into force recently. Copies of these have been sent to all cow-keepers and dairymen in the district, in order that steps may be taken by them to amend their premises to comply with the new requirements. Many of the premises are reported as being old, and not originally designed for keeping cows. The use of one cowshed was discontinued during 1908.

Heston and Isleworth.—Dr. Steegmann points out that “the powers of local authorities are limited, and it has often been difficult or impossible to get wrong, but not illegal, conditions altered. During the year 510 inspections of cowsheds and 2,483 of dairies and milk premises were made.

Ruislip-Northwood.—Dr. Hignett writes:—“I have personally inspected the cowsheds and dairies many times during the year, and many minor improvements have been effected in all, but still short of total demolition and reconstruction I fail to see how some of the buildings

can be brought up to the necessary standard." All the premises have a public water supply except three, and one of these has a good well supply. Veterinary inspection on behalf of the local authority is carried out when necessary. It is recommended that cows in the district should be tested by tuberculin periodically, and that definite regulations are desirable as to cleanliness in milking.

Southall-Norwood.—The condition of cowsheds is said to be generally satisfactory, and some, it is reported, are well kept and maintained. The desirability of veterinary inspection of milch cows was discussed by the local authority during the year, with the conclusion that this could be better carried out by a central authority, such as the County Council.

Staines (urban).—Veterinary examination of the milch cows is made periodically; no cases of tuberculosis of the udder were discovered. One cowkeeper who continued to sell milk in the district, "after having been struck off the register on account of the insanitary condition of his cowsheds," was prosecuted and fined.

Sunbury.—The condition of dairies and cowsheds is reported to be satisfactory.

Teddington.—In this district veterinary examination of milch cows is made on behalf of the local authority once a quarter. The reports have been satisfactory.

Tottenham.—The practice of milk being sold in small general shops is commented on, and the medical officer of

health expresses the opinion that power should be given to local authorities to refuse to register any premises for this purpose until they have been reported on by him as being properly fitted for the storage and sale of milk. Veterinary examination of milch cows in the district is recommended.

Uxbridge (urban).—A brief report for the year by the veterinary surgeon employed by this authority is appended to the report of the medical officer of health. It states that no case of tuberculous disease of the udder was found, that the hygienic surroundings of the cows has improved, and that their state of cleanliness has been much better. He adds that he has had little complaint to make as to the condition of the premises.

Wealdstone.—It is reported that the greater part of the milk supply comes from outside the district. Dr. G. Butler advises that the cows in the district should be periodically examined by a veterinary surgeon, and sets out some simple rules to be adopted by cowkeepers, which he recommends should be printed and distributed to them to hang in the cowsheds.

Wembley.—Dr. Goddard reports that the cowsheds and dairies are well kept. Veterinary examination of milch cows on behalf of the sanitary authority is not made.

Hendon (rural).—It is reported that an outbreak of cowpox occurred on a farm, sixteen cows were affected and two men contracted the disease. Details are not given.

South Mimms.—Dr. Gruggen again recommends the employment of a veterinary surgeon, under the Order of 1899, to examine cows for tuberculosis of the udder. No details are given as to the condition of the cowsheds.

Staines (rural).—Dr. Morris reports that in the early part of the year it was found that there were 839 cows in the district, of which 574 were in milk. He adds that he advised the appointment of a veterinary surgeon to examine them for tuberculosis, but the authority have not yet acted on his advice.

Uxbridge (rural).—The medical officer of health states that the cowsheds and dairies are inspected quarterly.

Dairies, Cowsheds, and Milkshops.

District.	No of Cowsheds registered.	No. of Cows.	No. of Dairies and Milkshops registered.	If Regulations adopted.	Contraventions of Regulations.	
					Cowsheds.	Dairies and Milkshops.
<i>Urban.</i>						
Acton ..	2	105	76	yes	3	11
Brentford ..	3	28	50	yes	—	—
Chiswick ..	2	8	35	yes	—	—
Ealing (<i>Borough</i>) ..	7	about 200	44	yes	1	5
Edmonton ..	3*	24	51	yes	27	33
Enfield ..	37	421	74	yes	—	—
Feltham ..	—	—	2	yes	—	—
Finchley ..	41 including dairies and milkshops	140	{ Included } in No. of cowsheds	yes	—	—
Friern Barnet ..	4	about 160	14	yes	2	2
Greenford ..	7	256	—	yes	2	—
Hampton ..	7	103	6	yes	2	—
Hampton Wick ..	1	12	3	yes	—	3
Hanwell ..	—	—	16	yes	—	—
Harrow ..	8	154	10	yes	—	—

Hayes ..	..	..	4	{	about 100	3	yes	—	—	—
Hendon ..	..	..	28	}	550	29	yes	5	3	—
Heston and Isleworth ..	..	..	14		141	51	yes	32	68	—
Hornsey (<i>Borough</i>) ..	..	..	3		66	78	yes	—	17	—
Kingsbury ..	..	..	2		—	3	yes	—	—	—
Ruislip-Northwood ..	..	..	19		182	8	yes	11	1	—
Southall-Norwood ..	..	..	7		200	26	yes	4	10	—
Southgate ..	..	..	12	{	about 200	21	yes	1	—	—
Staines ..	..	..	10	}	100	13	yes	10	1	—
Sunbury ..	..	..	5		116	5	yes	—	—	—
Teddington ..	..	..	7		54	24	yes	3	—	—
Tottenham ..	..	..	25		—	207	yes	—	—	—
Twickenham ..	..	..	9		112	31	yes	3	—	—
Uxbridge ..	..	..	—		—	—	yes	—	—	—
Wealdstone ..	..	..	3		—	6	yes	2	4	—
Wembley ..	..	..	11		250	14	yes	8	—	—
Willesden ..	..	..	6		84	131	yes	12	25	—
Wood Green ..	..	..	5		9	36	yes	—	2	—
<i>Rural.</i>										
Hendon ..	..	..	33		449	27	yes	15	8	—
South Mimms ..	..	..	10		140	10	yes	—	—	—
Staines ..	..	..	33		574	36	yes	—	1	—
Uxbridge ..	..	..	27		411	30	yes	1	1	—
TOTAL	..	..	395		5,477	1,170		144	195	

* Only two occupied by cows.

SLAUGHTER HOUSES.

The number of premises of this class in each district will be seen by reference to the sanitary tables at the end of the report, where particulars are given as to the frequency of inspection and the contraventions found. The districts which have adopted by-laws are set out in the section relating to adoptive Acts and by-laws.

The total number of slaughter houses in the county is 208, and 93 contraventions of by-laws are reported by the district medical officers of health.

OFFENSIVE TRADES.

There is nothing to add in regard to this class of business to what was set out in last year's report. The number of premises in which trades of this sort are carried out, and the districts in which they are situated, are set out in the sanitary tables at the end of this report, to which reference should be made on the matter.

ICE CREAM.

From the references made in the reports of many of the sanitary inspectors there is evidence that the powers obtained in the Middlesex General Powers Act, 1906, are being utilized in those districts in which this article of food is manufactured and sold.

UNSOUND FOOD.

Full details as to the action taken in each district in dealing with unsound food will be found in the sanitary tables appended to this report.

HOUSE REFUSE COLLECTION AND DISPOSAL.

In the sanitary tables given at the end of this report details will be found as to the frequency of collection of house refuse in the different districts of the County. These are based upon the information supplied by each medical officer of health as regards the district for which he acts.

In two districts the subject of house refuse collection was under consideration on several occasions during the year, but apparently in neither instance has a definite decision been yet arrived at.

Thus, in the report on the rural district of Staines, Dr. Morris states that the consideration of the matter was postponed. He gives no details on the subject, but it would appear that the present method gives rise at times to nuisance, as he writes, "So far the sanitary inspectors deal with the accumulations when found under" section 91 of the Public Health Act.

In the other instance, viz., that of the urban district of Uxbridge, Dr. Lock writes—"After several communications with the Local Government Board in connection with this subject, the council resolved to collect refuse weekly where asked to do so, and at an early date to reconsider the whole question." He adds that the present arrangement is unsatisfactory, as the occupants of those houses from which frequent collection is most necessary in order to avoid nuisance, will not make application for removal of the refuse.

In the case of Teddington a system of "daily collection" has now been in force for a few years, and an inquiry into the result of it was made by a committee of the district

council. The conclusion arrived at was that the system was much to be preferred to the old system of fortnightly collection, that it was more economical, and that in view of the few complaints received it had the approval of the ratepayers.

The question of disposal of refuse after collection was dealt with at length in the County report of 1907, and what I then stated need not be repeated.

It is satisfactory to record that dust destructor buildings have now been completed in the districts of Acton, Hampton, Southgate and Wood Green, and that Teddington has decided to erect one. In addition to these the following districts have erected these premises—

Brentford.	Heston and Isleworth.
Chiswick.	Hornsey.
Tottenham.	

In the district of Southall-Norwood a site for the purpose has been purchased.

In Teddington complaints arose of nuisance from the present system of tipping refuse into disused gravel pits.

FACTORY AND WORKSHOP ACT.

The tabular statement which follows has been compiled from the tables which each medical officer of health is required to fill up and forward to the Home Secretary, together with so much of his annual report as relates to factories and workshops.

In the report of 1907 it was stated that on January 1st, 1908, additional powers came into force under the Factory and Workshop Act, 1907. The more important provisions, so far as public health administration is concerned, are those extending the then existing powers relating to laundries to all "laundries carried on by way of trade, or for the purpose of gain, or carried on as ancillary to another business, or incidentally to the purposes of any public institution." In the case of Middlesex this had importance, as in the district of Acton there are a considerable number of laundries. Dr. Thomas reports that the provisions of the Act were advertised by the local authority, but that only three domestic laundries were registered during 1908.

The details of the work carried out in each district are as follows:—

TABLE SHOWING PROCEEDINGS OF SANITARY AUTHORITIES

	Acton.	Brentford.	Chiswick.	Ealing (Borough).	Edmonton.	Enfield.
1. <i>Inspections.</i>						
Factories (including Factory Laundries)	25	13	36	17	54	46
Workshops (including Work- shop Laundries)	167	69	163	293	230	534
Workplaces (other than Out- workers' premises, included in Part 3) .. .. .	..	..	42	..		..
Total Inspections ..	132	82	241	310	284	580
(a) Total Prosecutions ..	..	..	..	..	..	..
2. <i>Defects Found.</i>						
Nuisances under Public Health Acts	59	9	11	34	44	27
Offences under Factory and Workshop Act .. .. .	..	5	..	..	..	25
Total defects found ..	59	14	11	34	44	52
3. <i>Home Work.</i>						
(a) Number of names of Outworkers received from employers twice in the year	208	..	36	42	15	20
(b) Ditto once in the year ..	10	3	..	5	..	5
(c) Number of addresses of Outworkers received from other Councils	33	1	46	13	163	19
(d) Number of addresses of Outworkers forwarded to other Councils	8	..	25	10	1	10
(e) Number of inspections of Outworkers' premises ..	200	4	49	50	236	36
(f) Outwork in unwholesome premises (Section 108)— Instances .. .. .	..	..	..	4	..	..
(g) Outwork in infected premises (Sections 109 and 110)—Instances	4	..	..	..	..	..
4. Registered Workshops— Total	394	98	187	270	233	184
5. Underground Bakehouses in use at the end of the year ..	8	2	4	7	1	1

UNDER THE FACTORY AND WORKSHOP ACT.

Feltham.	Finchley.	Friern Barnet.	Greenford.	Hampton.	Hampton Wick.	Hanwell.	Harrow.	Hayes.	Hendon (urban).	Heston and Isleworth.	Hornsey (Borough).
12	18	17	12	6	8	..	26	32	25	56	68
5	279	104	..	126	22	105	112	3	122	331	736
..	..	187	..	..	22	4	108	..	..	87	113
17	297	308	12	132	52	109	246	35	147	474	917
..
..	95	4	8	14	..	5	33	..	40	63	103
..	9	..	..	7	..	6	..	..	6	27	3
..	104	4	8	21	..	11	33	..	46	90	106
..	..	..	..	4	2	..	7	..	..	34	89
..	12	..	..	..	..	..	3	..	..	..	32
..	11	9	..	..	4	10	3	..	9	2	122
..	3	3	..	4	..	..	2	..	..	6	97
..	19	9	..	1	2	10	18	..	30	36	183
..
..	..	..	..	1	..	..	..	..	..	1	..
3	181	31	..	43	11	52	62	..	122	250	332
..	..	2	..	..	..	4	1	..	1	1	5

TABLE SHOWING PROCEEDINGS OF SANITARY AUTHORITIES

	Kingsbury.	Ruishp- Northwood.	Southall- Norwood.	Southgate.	Staines (urban).	Sunbury.
1. <i>Inspections.</i>						
Factories (including Factory Laundries) .. .. .	..	12	21	10	16	..
Workshops (including Workshop Laundries) .. .. .	..	24	52	127	24	8
Workplaces (other than Outworkers' premises, included in Part 3)	1	..	7	16	..	..
Total Inspections ..	1	36	80	153	40	8
(a) Total Prosecutions ..	..	..	..	..	..	..
2. <i>Defects Found.</i>						
Nuisances under Public Health Acts .. .. .	..	2	9	26	4	1
Offences under Factory and Workshop Act .. .. .	..	..	9	..	..	..
Total defects found ..	..	2	18	26	4	1
3. <i>Home Work.</i>						
(a) Number of names of Outworkers received from employers twice in the year .. .. .	..	..	{ 7	28	..	..
(b) Ditto once in the year .. .. .	..	..	{	..	..	..
(c) Number of addresses of Outworkers' received from other Councils .. .. .	..	..	7	20	..	1
(d) Number of addresses of Outworkers forwarded to other Councils .. .. .	..	..	..	30	..	..
(e) Number of Inspections of Outworkers' premises .. .. .	..	..	12	40	..	..
(f) Outwork in unwholesome premises (Section 108)—Instances .. .. .	..	..	..	..	..	..
(g) Outwork in infected premises (Sections 109 and 110)—Instances .. .. .	..	..	..	..	..	..
4. Registered Workshops—Total	2	14	57	117	59	No Register kept. Number of workshops very small.
5. Underground Bakehouses in use at the end of the year ..	..	1	1	..	..

UNDER THE FACTORY AND WORKSHOP ACT—continued.

Teddington.	Tottenham.	Twickenham.	Uxbridge (urban).	Wealdstone.	Wembley.	Willesden.	Wood Green.	Hendon (rural).	South Mimms (rural).	Staines (rural).	Uxbridge (rural).
32	311	12	12	17	10	41	5	19	..	Periodically.	11
} 70	782	153	8	126	40	318	308	32	..		39
		6	86	..	..	..	..	..	..		..
102	1,093	171	106	143	50	359	313	51	..	Periodically.	50
..
12	39	43	15	15	4	203	7	3	..	..	7
..	9	..	..	..	..	..	..	1	..	..	..
12	48	43	15	15	4	203	7	4	..	..	7
..	51	22	..	..	..	42	17	..	..	..	..
..	23	4	..	9	..	31	..	..	..	..	..
3	654	7	..	2	4	126	60	..	..	..	4
..	36	2	..	..	..	29	36	..	..	..	..
3	269	22	..	2	4	96	75	..	..	..	8
..	..	2	..	..	..	1	..	..	..	..	..
..	..	..	..	..	..	4	..	..	..	..	..
22	338	134	57	44	27	456	111	17	..	54	39
1	7	3	1	..	1	25	1	..	..	..	1

SANITARY STAFF.

In the forms supplied by the County Council to the local medical officers for the purpose of their annual reports a column is now included upon which can be set out details of the existing sanitary staff. The information given is to the following effect :—

Acton.—Three inspectors, two health visitors (one of whom is paid by the Education Committee), one clerk and one disinfecter.

Brentford.—One inspector, one clerk.

Chiswick.—Three inspectors, one clerk.

Ealing.—Three inspectors, one clerk. This is an increase of one inspector compared with 1907.

Edmonton.—Three inspectors, one woman inspector, two clerks, one disinfecter, and six men employed in various duties in the Public Health Department.

Enfield.—Three inspectors, two clerks, one outdoor assistant and two disinfectors. This shows an increase of one clerk.

Feltham.—One inspector, who is also the surveyor, one sanitary foreman and two men for cesspool cleansing, and one man for house refuse collection.

Finchley.—Two inspectors, one clerk and one disinfecter.

Friern Barnet.—One inspector. A labourer from the surveyor's department occasionally helps in testing drains.

Greenford.—One sanitary inspector, who is also the surveyor and rate collector.

Hampton.—One inspector.

Hampton Wick.—One inspector, who is also the surveyor.

Hanwell.—One inspector.

Harrow.—One inspector.

Hayes.—One inspector, who is also the surveyor.

Hendon (urban).—One inspector, and one assistant disinfecter, &c.

Heston and Isleworth.—Three inspectors, two clerks, one labourer (disinfecter, &c.). An increase of one clerk.

Hornsey.—One assistant medical officer of health, three inspectors, one clerk, three disinfectors and drain testers.

Kingsbury.—One inspector, who is also the surveyor.

Ruislip-Northwood.—One inspector, who is also the surveyor.

Southall-Norwood.—One inspector, two disinfectors.

Southgate.—Two inspectors and one disinfecter.

Staines (urban).—One inspector, who is also the surveyor.

Sunbury.—One inspector, who is also the surveyor, and one clerk.

Teddington.—One inspector, who has assistance when required for disinfecting.

Tottenham.—Six inspectors, one female health visitor, one female sanitary inspector, four clerks, one mortuary attendant and three disinfectors.

Twickenham.—Two inspectors.

Uxbridge (urban).—One inspector, who is also water inspector. For disinfecting and drain testing the inspector is assisted by labourers when required. A veterinary inspector is employed in connection with the Dairies, Cowsheds and Milkshops Regulations.

Wealdstone.—One inspector, who is also the surveyor, and one assistant sanitary inspector.

Wembley.—One inspector, and a labourer when required.

Willesden.—Six inspectors, three female health visitors and three clerks.

Wood Green.—Three inspectors, one female health visitor (temporary) and one clerk.

Hendon (rural).—One inspector.

South Mimms (rural).—One inspector, who is also the surveyor.

Staines (rural).—Two inspectors. Formerly there was one inspector, but upon his decease the work was reorganized and two officers appointed.

Uxbridge (rural).—One inspector.

ADOPTIVE ACTS AND BY-LAWS.

In the report of last year tables were given showing the various adoptive acts and by-laws relating to sanitary administration which are in force in the different districts in the County.

These tables have been corrected and brought up to date by inquiry made specially for the purpose, and for purposes of reference they are again set out here.

Another adoptive act, in addition to those given in the table, was passed in 1907, viz., The Public Health Acts Amendment Act. This, which can be adopted in part, contains many additional powers for the control of matters for which the existing powers have been found inadequate. Some of the districts of Middlesex had, previous to 1907, obtained by means of local acts many of the powers contained in this adoptive act. These can now be obtained by an authority without the expense and trouble involved in applying for special acts.

Unfortunately the information given in the annual reports does not enable precise account to be given as to which local authorities have adopted any part of the act, but the following appear to have done so, or have made application to the Local Government Board for sanction to adopt.

Edmonton.—Application has been made to the Local Government Board for approval to adopt such parts of the act as are not provided for in the Edmonton Local Act, 1898.

Friern Barnet.—The Local Government Board, upon the application of the local authority, have issued an order declaring certain parts of the Public Health Act Amendment Act, 1907, in force in the district.

Hampton Wick.—It is stated that the act has been adopted.

Wembley.—Parts ii, iii, iv., and v. of the act are in force.

Staines (rural).—The district council have applied for sanction to adopt:—

Part ii., sections 15, 16, 22, 23, 25, 27, 30.

„ iii., „ 34–37 (inclusive), 43–46 (inclusive).

„ iv., „ 52–57 (inclusive), 60–68 (inclusive).

The districts in the County which have obtained additional powers by means of private acts are:—

Acton, 1904.

Finchley, 1908.

Ealing, 1905.

Willesden, 1903.

Edmonton, 1898.

Wood Green, 1903.

In the case of Staines (urban) the medical officer of health states that the district council are applying for the confirmation of by-laws in regard to offensive trades and slaughter-houses. The rural district council of Staines have also drafted by-laws as to slaughter-houses, and are awaiting their confirmation by the Local Government Board.

Adoptive Acts in force.

	Infectious Diseases (Prevention) Act, 1890.	Public Health Act, Amendment Act, 1890, Part iii.	Housing of the Working Classes Act, 1890, Part iii.	Notification of Births Act, 1907.
<i>Urban.</i>	1	2	3	4
Acton	Yes	Yes	Yes	Yes
Brentford	Yes	Yes	Yes	
Chiswick	Yes	Yes	Yes	Yes
Ealing (<i>Borough</i>)	Yes	Yes	Yes	
Edmonton	Yes	Yes	Yes	Yes
Enfield	Yes	Yes	No	
Feltham	Yes	No	No	
Finchley	Yes	Yes*	Yes	Yes
Friern Barnet	Yes	Yes	No	Yes
Greenford	Yes	Yes	Yes	
Hampton	Yes	Yes	Yes	
Hampton Wick	Yes	Yes	Yes	
Hanwell	Yes	Yes	Yes	
Harrow	Yes	Yes	Yes	
Hayes	Yes	Yes	No	
Hendon	Yes	Yes	Yes	
Heston & Isleworth	Yes	Yes	Yes	
Hornsey (<i>Borough</i>)	Yes	Yes	Yes	
Kingsbury	Yes	Yes	No	
Ruislip-Northwood	Yes	Yes	No	
Southall-Norwood	Yes	Yes	No	
Southgate	Yes	Yes	Yes	
Staines	Yes	Yes	No	
Sunbury	Yes	Yes	No	
Teddington	Yes	Yes	Yes	
Tottenham	Yes*	Yes	Yes	Yes
Twickenham	Yes	Yes	Yes	
Uxbridge	Yes	Yes	No	
Wealdstone	Yes	Yes	No	
Wembley	Yes	Yes	No	
Willesden	No*	Yes	No	Yes
Wood Green	Yes	Yes	Yes	Yes
<i>Rural.</i>				
Hendon	Yes	Yes	—	
South Mimms	Yes	Yes	No	
Staines	Yes	Yes	No	
Uxbridge	Yes	Yes	—	

* Finchley. Also Parts ii. and v.

Tottenham. Sections 4, 5, 6, 8, 10, 12, 15, 16, 17, 18, 20.

Willesden. Chief provisions embodied in Willesden Local Act, 1903.

BY-LAWS IN FORCE.

District.	URBAN AND RURAL AUTHORITIES.					URBAN AUTHORITIES.								RURAL
	Common Lodging Houses. (P.H.A., 1875, s. 80.)	Cleansing, &c., and Removal of Refuse. (P.H.A. 1875, s. 44.)	Houses let in Lodgings. (P.H.A. 1875, s. 90.)	Tents, Vans, Sheds, &c. (H.W.C.A., 1885, s. 9 (2).)	Public Mortuaries. (P.H.A., 1875, s. 141.)	Slaughter Houses. (P.H.A., 1875, s. 80.)	Prevention of Nuisances. (P.H.A., 1875, s. 44.)	Keeping of Animals. (P.H.A., 1875, s. 44.)	Offensive Trades. (P.H.A., 1875, s. 113.)	New Streets and Buildings. (P.H.A., 1875, s. 157, and P.H.A.A., 1890, 28.)	Removal of Offensive Matters and House Refuse. (P.H.A.A., 1890, s. 26.)	Public Conveniences. (P.H.A.A., 1890, s. 20.)	Public Baths and Washhouses. (B. & W.A., 1846, s. 31.)	Buildings, Limited Powers. (P.H.A.A., 1890, s. 23 (3).)
<u>Urban.</u>														
Acton	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Brentford	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Chiswick	No	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	No	No
Ealing (<i>Borough</i>)	Yes	Yes	No	Yes	Reg	Yes	Yes	No	No	Yes	Yes	Yes	Reg	No
Edmonton	Yes	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	No	No	No
Enfield	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	No	No	No	No
Feltham	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No
Finchley	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Friern Barnet	—	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No
Greenford	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No
Hampton	No	Yes	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

Hampton Wick	..	Yes	No	Yes	Yes	No	Yes	No	No	No	—
Hanwell ..	..	Yes	Yes	Yes	Yes	No	Yes	No	No	No	—
Harrow ..	..	Yes	Yes	No	Yes	No	No	No	No	No	—
Hayes ..	..	Yes	No	No	Yes	No	No	No	No	No	—
Hendon ..	..	Yes	Yes	No	Yes	Yes	Yes	No	No	No	—
Heston & Isleworth	..	Yes	Yes	Yes	Yes	No	Yes	No	No	No	—
Hornsey (<i>Borough</i>)	..	Yes	Yes	No	Yes	Yes	No	No	No	No	—
Kingsbury ..	..	No	No	No	No	No	No	No	No	No	—
Ruislip-Norwood	..	No	Yes	Yes	Yes	Yes	Yes	No	No	No	—
Southall-Norwood	..	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	—
Southgate ..	..	Yes	Yes	No	Yes	No	Yes	No	No	No	—
Staines ..	..	Yes	No	No	No*	No	No	No	No	No	—
Sunbury ..	..	No	No	No	No	Yes	No	No	No	No	—
Teddington	..	No	No	Yes	Yes	No	Yes	No	No	No	—
Tottenham ..	..	Yes	Yes	Yes	Yes	No	Yes	No	No	No	—
Twickenham	..	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	—
Uxbridge ..	..	Yes	Yes	No	Yes	No	Yes	Yes	No	No	—
Wealdstone	..	Yes	Yes	—	Yes	—	Yes	—	No	No	—
Wembley ..	..	Yes	Yes	Yes	Yes	No	Yes	No	No	No	—
Willesden ..	..	Yes	Yes	No	Yes	No	No	Yes	No	No	—
Wood Green	..	No	Yes	No	Yes	No	Yes	No	—	Yes	—
<i>Rural.</i>											
Hendon ..	..	Yes	Yes	Yes	Yes	No	Yes	No	Yes	—	—
South Mimms	..	No	No	No	No	No	No	No	No	No	No
Staines*	..	No	No	No	No	Yes	Yes	—	—	—	No
Uxbridge ..	..	No	No	Yes	Yes	—	Yes	—	—	—	No

* Staines (rural) see text.

* Staines (urban) see text.

MEDICAL INSPECTION OF CHILDREN IN THE PUBLIC
ELEMENTARY SCHOOLS.

As one of the local authorities for the purpose of elementary education within the administrative County, the County Council had placed upon them by the Education (Administrative Provisions) Act, 1907, the duty of providing for the medical inspection of children in the public elementary schools. The other authorities in the County which also had to make this provision as being authorities for elementary education are:—

Acton.	Heston and Isleworth.
Chiswick.	Hornsey.
Ealing.	Tottenham.
Edmonton.	Twickenham.
Enfield.	Willesden.
Finchley.	Wood Green.
Hendon (urban).	

Dealing first with the area under the County Council, the arrangements made in 1908 for the purpose are as follows:—

Two assistant school medical officers, namely Dr. Palgrave and Dr. Tate, were appointed to carry out the work under the supervision of the County medical officer, who was appointed school medical officer.

The work was commenced in April, 1908, and the results of the inspection up to the end of the calendar year were embodied in a report which was published by the Education Committee.

The total number of children examined was 6,611, namely, 3,289 boys and 3,322 girls. Children were inspected in all the districts in the school area. Full details as to the number examined in each district and as to the various conditions found to exist are set out in the report referred to above.

In addition to the above, 414 other children were examined in connection with the granting of County scholarships.

Further, in connection with the occurrence of infectious disease amongst scholars at the schools, it has been necessary at various times during the year to visit different schools, and to examine the children to see whether any of them presented symptoms raising suspicion, either that they were suffering in a mild form from, or were sickening for, the complaint which had occurred.

In these instances the first intimation of the occurrence of infectious disease amongst the scholars is obtained either from the district medical officer of health or from the teacher. If from the latter the medical officer of health is, whenever possible, at once communicated with so that he may visit the school, and, in consultation, decide with me as to the best course to take under the circumstances.

As regards the autonomous districts in the County, the arrangements which have been made by the district councils as local education authorities for carrying out the work of medical inspection, so far as information is available, is as follows:—

Acton.—The medical officer of health has been appointed school medical officer, and Dr. Lilian E. Wilson, assistant

medical officer of health, and to devote all her time to the work of medical inspection. A nurse has also been appointed for the work arising out of the inspection. A detailed report is published with the annual report of the medical officer of health. A total of 1,673 children was examined.

Chiswick.—No information.

Faling.—Dr. Patten, the medical officer, states that a medical inspector and a health visitor or school nurse have been appointed for the school work, and that the work has been actively carried on during the year.

Edmonton.—In this district a school medical officer and a school nurse have been appointed. The services of the medical officer of health have not been employed by the committee.

From the report of Dr. Rock, the school medical officer, it appears that the work of inspection commenced in September, 1908, and that 1,396 children were examined.

Enfield.—No information. The medical officer of health is apparently not employed in the work.

Finchley.—The medical officer of health has been appointed school medical officer. A school nurse has also been appointed, whose duties are:—

(a) To assist at the time of the medical inspection ;

(b) To follow up, by visits to the homes, those cases in which advice has been given, and to persuade those parents who have not taken action, to have the defects remedied.

(c) To make periodical visits to the schools with a view to personal cleanliness.

A report of the work done is published with the annual report of the medical officer of health. A total of 783 children, namely 380 boys and 403 girls, was examined.

Hendon (urban).—No information.

Heston and Isleworth.—The medical officer of health was appointed school medical officer. No information as to work done.

Hornsey.—The medical officer of health is school medical officer.

Tottenham.—The medical officer of health is school medical officer. Dr. Sophia Seekings was appointed assistant in November, 1908, and a school nurse has also been appointed.

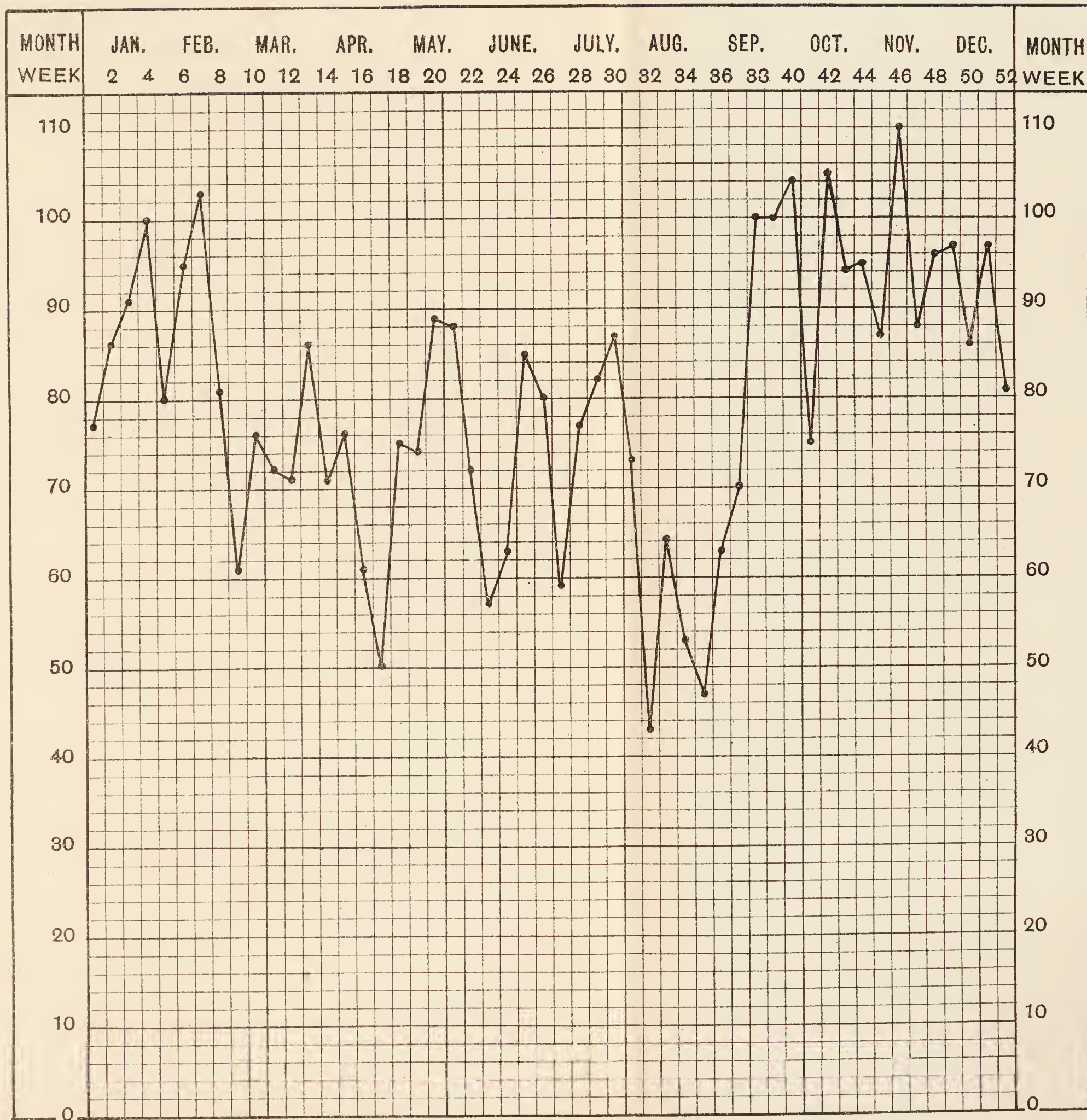
Twickenham.—The medical officer of health has been appointed school medical officer and Dr. Martha Adams as assistant school medical officer. A school nurse has also been appointed. The work was commenced in June, 1908, and a total of 1,384 children was examined up to the end of the year.

Willesden.—The arrangements for carrying out the work of medical inspection of school children were only settled at the end of the year. The medical officer of health was appointed school medical officer, with a number of assistant school medical officers to make the examinations.

Wood Green.—The medical officer of health is the school medical officer. To assist him in the work an assistant medical officer was appointed in June to devote part of his time to the work. A school nurse has also been appointed.

SCARLET FEVER.

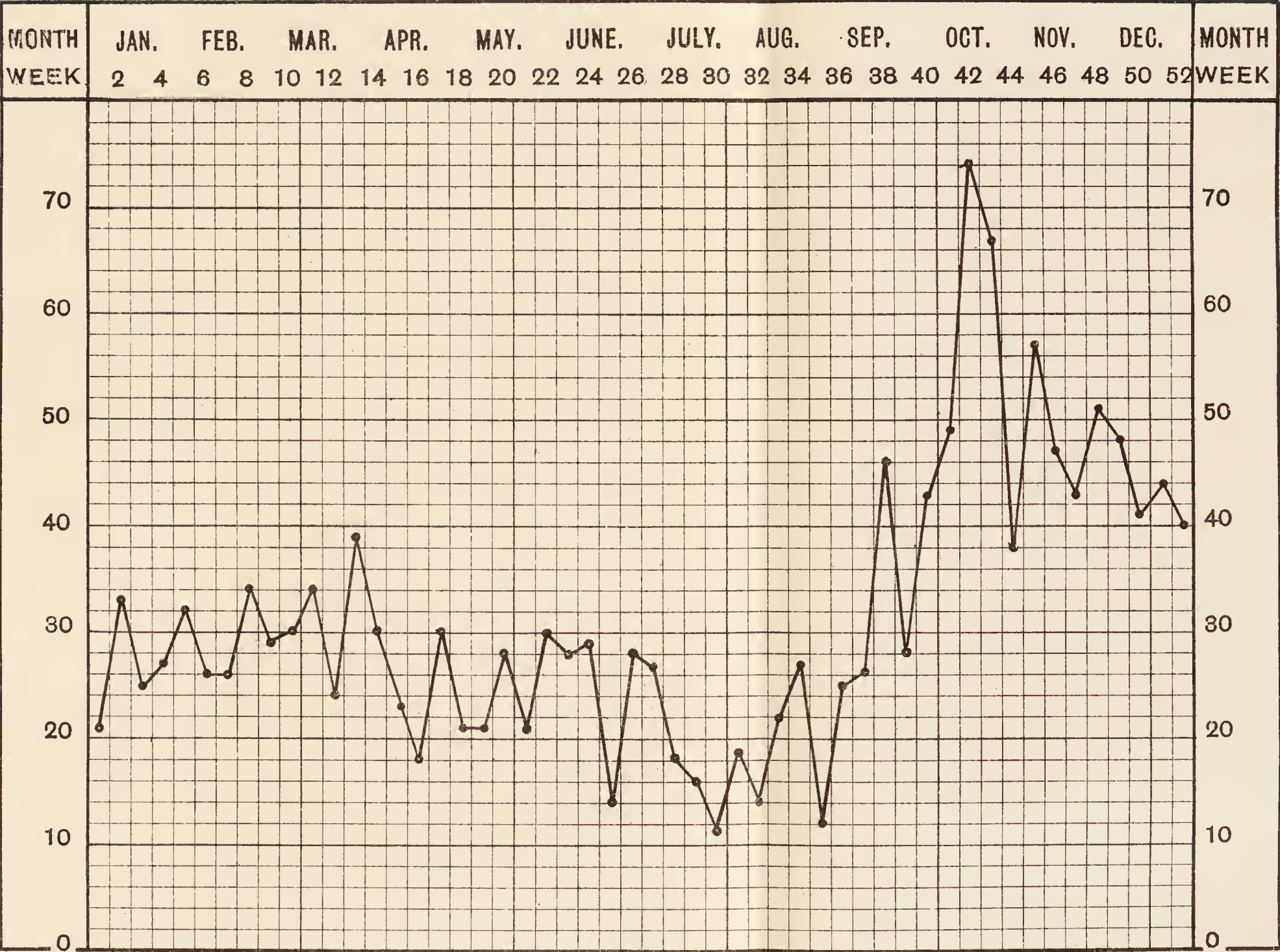
WEEKLY NOTIFICATIONS 1908.



ADMINISTRATIVE COUNTY OF MIDDLESEX.

DIPHThERIA AND MEMBRANOUS GROUp.

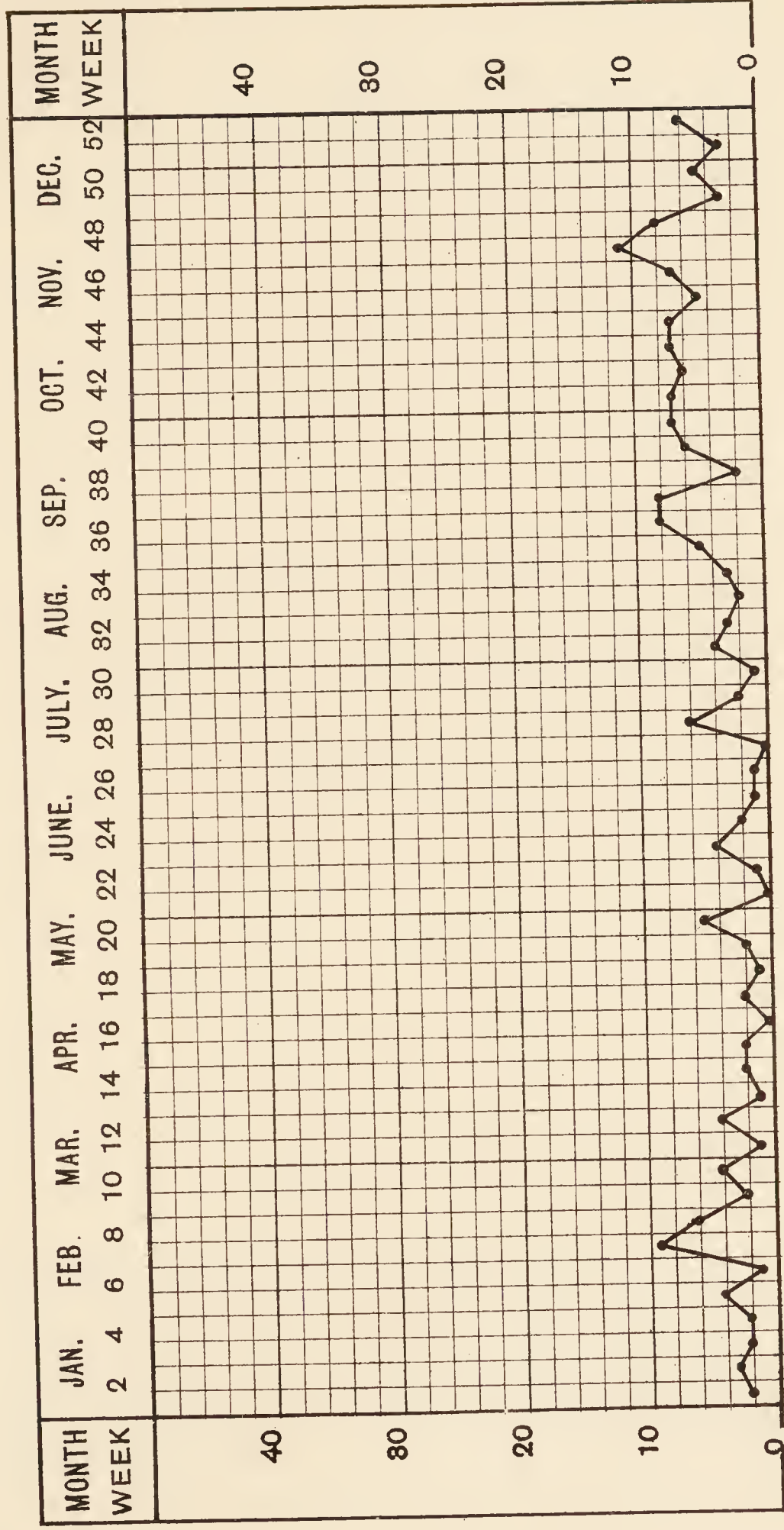
WEEKLY NOTIFICATIONS 1908.



ADMINISTRATIVE COUNTY OF MIDDLESEX.

ENTERIC FEVER.

WEEKLY NOTIFICATIONS 1908.



ADMINISTRATIVE COUNTY OF MIDDLESEX.

FURTHER STATISTICS
RELATING TO EACH SANITARY
DISTRICT.

NOTE.—The death-rates given in this part are the recorded death-rates after correction for outside deaths. They are not corrected for age and sex distribution, in order that they may be comparable with the death-rates of previous years. The corrected death-rates for comparison of one district with another are given on page 28.

ACTON URBAN DISTRICT.

Medical Officer of Health, D. J. Thomas, M.R.C.S.,
L.R.C.P., D.P.H.

Area in acres 2,305.

Census, 1901. *Estimated*, 1908.

Population . . 37,744 55,000

	1905.	1906.	1907.	1908.
Birth-rate	30·5	29·4	29·0	28·5
Recorded death-rate	12·5	13·2	13·9	13·1
Infant mortality . .	106	125	118	111
Phthisis death-rate	0·86	0·92	1·24	1·01
Scarlet fever	2·74	3·26	5·03	8·80
Diphtheria and	1·02	0·88	1·10	1·50
M. Croup				
Enteric fever	0·24	0·23	0·24	0·25
Scarlet fever	0·04	0·13	0·11	0·27
Diphtheria and	0·08	0·03	0·09	0·12
M. Croup				
Enteric fever	0·12	0·05	0·05	0·03

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

The more important references to the report on this area will be found in the sections dealing with general death-rates, infant mortality, scarlet fever, measles and tuberculosis, isolation hospitals, sewerage, house refuse, disposal and medical inspection of school children, in the preceding part of this report.

BRENTFORD URBAN DISTRICT.

Medical Officer of Health, Henry Bott, M.R.C.S., L.R.C.P.

Area in acres 1,091

Census, 1901. Estimated, 1908.
Population .. 15,171 16,194

	1905.	1906.	1907.	1908.
Birth-rate	33·6	29·9	32·3	28·6
Recorded death-rate	17·6	17·0	19·2	14·8
Infant mortality ..	115	140	113	120
Phthisis death-rate	0·88	0·88	1·99	0·98
Scarlet fever	4·25	10·05	6·54	2·59
Diphtheria and	5·40	6·66	3·24	1·60
M. Croup				
Enteric fever	0·38	0·31	0·18	0·12
Scarlet fever	0·04	0·44	0·37	—
Diphtheria and	0·69	0·75	0·37	0·12
M. Croup				
Enteric fever	0·06	0·06	0·06	0·06

*Rates are per 1,000 persons living, except infant mortality,
which is per 1,000 births.*

References to this district will be found in the sections relating to the general death-rate, scarlet fever, enteric fever, housing, canal boats, and dairies and cowsheds.

CHISWICK URBAN DISTRICT.

Medical Officer of Health, F. C. Dodsworth, M.R.C.S.,
L.R.C.P.

Area in acres 1,249

Census, 1901. Estimated, 1908.

Population .. 29,809 36,377

	1905.	1906.	1907.	1908.
Birth-rate	28·5	25·1	25·4	24·6
Recorded death-rate	12·9	13·0	11·5	12·1
Infant mortality ..	107	115	119	106
Phthisis death-rate	1·23	1·30	1·16	0·79
Scarlet fever	2·53	3·57	5·59	2·44
Diphtheria and M. Croup	1·21	0·82	0·83	0·88
Enteric fever	0·27	0·20	0·83	0·13
Scarlet fever	0·09	—	0·19	—
Diphtheria and M. Croup	0·15	0·14	0·08	0·05
Enteric fever	0·03	0·02	0·14	0·05

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

In the earlier part of the report reference will be found to this district under the following:—infant mortality, scarlet fever and diphtheria, housing, tenement houses, movable dwellings, sewerage, water supply, and house refuse disposal.

EALING (BOROUGH).

Medical Officer of Health, C. A. Patten, L.R.C.P., M.R.C.S.

Area in acres 2,947

Census, 1901. Estimated, 1908.

Population 33,031 51,000

	1905.	1906.	1907.	1908.
Birth-rate	23·3	24·2	24·7	24·5
Recorded death-rate	11·1	12·8	12·0	11·2
Infant mortality ..	101	129	91	80
Phthisis death-rate	0·80	0·80	0·64	0·78
Scarlet fever	3·43	2·75	3·51	2·11
Diphtheria and	1·35	2·9	2·38	0·84
M. Croup	0·21	0·14	0·18	0·09
Enteric fever..	0·04	0·02	0·04	0·01
Scarlet fever	0·13	0·22	0·22	0·09
Diphtheria and	0·06	—	0·04	0·01
M. Croup				
Enteric fever..				

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

The Borough of Ealing is referred to in the sections relating to infant deaths, scarlet and enteric fever, phthisis, housing, dairies and cowsheds, and medical inspection of school children.

EDMONTON URBAN DISTRICT.

Medical Officer of Health, S. C. Lawrence, M.B., Ch.B.,
D.P.H., M.R.C.S., L.R.C.P.

Area in acres 3,894

Census, 1901. Estimated, 1908.

Population { District .. 44,911 60,182
Institutions 1,988 2,004

	1905.	1906.	1907.	1908.
Birth-rate	35·6	33·1	31·2	32·1
Recorded death-rate	13·3	13·7	13·3	12·1
Infant mortality ..	128	131	112	106
Phthisis death-rate	0·77	1·14	0·89	0·89
Scarlet fever ..	4·58	6·74	3·88	5·11
Diphtheria and	Case-rate	1·64	1·59	2·62
M. Croup				
Enteric fever ..				
Scarlet fever ..	0·11	0·22	0·13	0·19
Diphtheria and	Death-rate	0·19	0·31	0·44
M. Croup				
Enteric fever ..				
Enteric fever ..	0·11	0·12	0·08	0·09

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district will be found referred to under infant mortality, scarlet and enteric fever, housing and sewerage, and the medical inspection of school children.

The infantile mortality, (1908) does not include 14 deaths of infants registered outside the district.

ENFIELD URBAN DISTRICT.

Medical Officer of Health, W. P. Warren, L.R.C.P., L.R.C.S.

Area in acres 12,601

Census, 1901. Estimated, 1908.

Population .. 42,738 56,185

	1905.	1906.	1907.	1908
Birth-rate	26·4	25·2	26·1	25·2
Recorded death-rate	11·1	11·2	12·3	11·1
Infant mortality ..	117	110	116	94
Phthisis death-rate	0·87	0·64	0·71	0·81
Scarlet fever	3·78	4·90	6·45	3·59
Diphtheria and	0·76	1·09	1·53	6·60
M. Croup				
Enteric fever	0·17	0·45	0·18	0·08
Scarlet fever	0·13	0·13	0·38	0·08
Diphtheria and	0·07	0·02	0·47	0·55
M. Croup				
Enteric fever..	0·07	0·03	0·07	0·01

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

The more important references to this district are under infant mortality, diphtheria, isolation hospitals, sewerage, dairies and cowsheds and medical inspection of school children.

The present medical officer of health has only held office for part of the year under review.

FELTHAM URBAN DISTRICT.

Medical Officer of Health, G. D. Morris, L.R.C.P.,
M.R.C.S., L.S.A.

Area in acres 1,790.

Census, 1901. *Estimated*, 1908.
Population .. 4,534 5,900

	1905.	1906.	1907.	1908.
Birth-rate	33·3	24·7	24·5	26·2
Recorded death-rate	13·4	11·2	12·2	14·2
Infant mortality ..	147	118	62	129
Phthisis death-rate	0·56	0·34	1·18	1·18
Scarlet fever	Case-rate 1·89 0·75 0·37	7·10 0·17 —	2·03 0·84 0·17	0·67 1·52 —
Diphtheria and M. Croup				
Enteric fever				
Scarlet fever	Death-rate — — —	0·17 — —	— — 0·17	— 0·16 —
Diphtheria and M. Croup				
Enteric fever				

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

See also sections dealing with enteric fever, measles, isolation hospitals, housing, sewerage and water supply.

FINCHLEY URBAN DISTRICT.

Medical Officer of Health, J. R. Prior, M.B., D.P.H.

Area in acres 3,384

Census, 1901. Estimated, 1908.

Population .. 22,126 39,499

	1905.	1906.	1907.	1908.
Birth-rate	25·9	25·1	24·5	22·4
Recorded death-rate	9·9	11·7	9·8	8·5
Infant mortality ..	91	117	94	60
Phthisis death-rate.	0·69	0·97	0·57	0·53
Scarlet fever	Case-rate 2·96	4·16	3·44	3·62
Diphtheria and M. Croup				
Enteric fever				
Scarlet fever	Death-rate —	0·16	0·05	0·10
Diphtheria and M. Croup				
Enteric fever				

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

See the sections of this report relating to infant mortality, enteric fever, measles, phthisis, isolation hospitals, housing, sewerage, dairies and cowsheds, and medical inspection of school children.

The medical officer of health was newly appointed to the post during the year under review.

FRIERN BARNET URBAN DISTRICT.

Medical Officer of Health, F. A. Spreat, F.R.C.S., D.P.H.

Area in acres 1,304

Census, 1901. Estimated, 1908.

Population {	District	8,816	10,422
	Asylum	2,750	2,473

	1905.	1906.	1907.	1908.	
Birth-rate	27·7	27·4	28·9	31·9	
Recorded death-rate	10·6	13·2	11·4	11·5	
Infant mortality ..	82	130	81	99	
Phthisis death-rate	0·66	0·56	0·78	0·67	
Scarlet fever	Case-rate	2·48	1·78	4·85	8·54
Diphtheria and M. Croup		1·53	1·12	1·66	1·82
Enteric fever		0·76	1·03	0·09	—
Scarlet fever	Death-rate	—	—	—	0·19
Diphtheria and M. Croup		0·19	0·09	0·09	0·09
Enteric fever		0·09	0·09	0·09	—

Rates are per 1000 persons living, except infant mortality, which is per 1,000 births.

References to this district will be found in the sections of this report relating to diphtheria, scarlet fever, whooping cough, isolation hospitals, movable dwellings, sewerage, water supply, and dairies and cowsheds.

GREENFORD URBAN DISTRICT.

Medical Officer of Health, G. Hope, M.R.C.S., L.R.C.P., D.P.H.

Area in acres 3,041

Census, 1901. Estimated, 1908.

Population .. 819 1,074

	1905.	1906.	1907.	1908.
Birth-rate	17·2	15·8	20·9	28·8
Recorded death-rate	9·0	14·1	11·4	15·8
Infant mortality ..	52	157	45	96
Phthisis death-rate	—	—	0·95	0·93
Scarlet fever	0·91	—	0·95	—
Diphtheria and	0·91	—	3·81	—
M. Croup	—	—	—	—
Enteric fever	—	—	—	—
Scarlet fever	—	—	—	—
Diphtheria and	—	—	—	—
M. Croup	—	—	—	—
Enteric fever..	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

The figures are small, and yearly rates are therefore liable to marked fluctuation. Reference will be found to this district under those sections in this report as to enteric fever, isolation hospitals, movable dwellings, and dairies, cowsheds and milkshops.

HAMPTON URBAN DISTRICT.

Medical Officer of Health, Wentworth Tyndale, M.B.

Area in acres 2,036

Census, 1901. Estimated, 1908.

Population .. 6,813 9,500

	1905.	1906.	1907.	1908.	
Birth-rate	30·8	22·0	20·0	21·6	
Recorded death-rate	11·8	10·5	10·3	9·7	
Infant mortality ..	86	90	107	77	
Phthisis death-rate	1·33	1·00	0·32	1·15	
Scarlet fever	Case-rate	4·93	2·66	0·96	1·47
Diphtheria and M. Croup		4·80	0·44	0·96	0·73
Enteric fever		0·26	0·11	0·21	0·10
Scarlet fever	Death-rate	—	—	—	—
Diphtheria and M. Croup		0·93	0·11	—	—
Enteric fever		—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

See also the sections of this report as to isolation hospitals, housing, movable dwellings, house refuse disposal, and milkshops and cowsheds.

HAMPTON WICK URBAN DISTRICT.

Medical Officer of Health, H. A. Günther, M.B., M.R.C.S.,
L.R.C.P.

Area in acres 1,314

Census, 1901. Estimated, 1908.

Population . . . 2,606 . . . 2,665

	1905.	1906.	1907.	1908.
Birth-rate	14·2	15·2	14·4	15·0
Recorded death-rate	8·4	10·2	12·5	13·5
Infant mortality ..	108	25	184	150
Phthisis death-rate	0·38	1·14	—	1·12
Scarlet fever	1·15	16·73	2·66	1·12
Diphtheria and	1·92	—	1·58	1·12
M. Croup	—	1·90	—	—
Enteric fever	—	0·38	—	—
Scarlet fever	0·38	—	—	—
Diphtheria and	—	0·76	—	—
M. Croup	—	—	—	—
Enteric fever	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

Hampton Wick is referred to in the sections of this report relating to infant mortality, enteric fever, isolation hospitals, housing, dairies, movable dwellings, common lodging houses, water supply, and milkshops, cowsheds and dairies.

HANWELL URBAN DISTRICT.

Medical Officer of Health, G. Hope, D.P.H., M.R.C.S.,
L.R.C.P.

Area in acres 1,067

Census, 1901. Estimated, 1908.
Population .. 10,438 20,682

	1905.	1906.	1907.	1908.
Birth-rate	26·2	28·5	24·4	23·8
Recorded death-rate	8·2	12·1	8·8	9·9
Infant mortality ..	103	131	101	107
Phthisis death-rate	0·51	0·55	0·99	0·62
Scarlet fever	5·40	4·85	5·46	3·72
Diphtheria and	0·87	1·9	1·24	1·16
M. Croup				
Enteric fever	—	0·20	—	—
Scarlet fever	—	0·10	—	0·09
Diphtheria and	0·10	0·15	0·19	0·09
M. Croup				
Enteric fever	—	0·05	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

References to this district will be found in the sections of this report as to infantile mortality, scarlet fever, phthisis, isolation hospitals, housing, movable dwellings and canal boats.

HARROW URBAN DISTRICT

Medical Officer of Health, J. Fletcher Little, M.B., M.R.C.P.

Area in acres.. .. 2,028

Population *Census, 1901.* 10,220 *Estimated, 1908.* 16,132

	1905.	1906.	1907.	1908.
Birth-rate	24·0	23·2	23·5	21·4
Recorded death-rate	9·3	9·4	6·9	7·0
Infant mortality ..	57	88	54	92
Phthisis death-rate	0·46	0·58	0·33	0·80
Scarlet fever ..	1·30	1·31	2·02	3·03
Diphtheria and M. Croup	0·46	0·4	0·26	1·24
Enteric fever ..	0·23	0·29	0·33	0·18
Scarlet fever ..	—	—	0·20	—
Diphtheria and M. Croup ..	—	—	—	—
Enteric fever ..	0·07	0·14	—	0·06

Rate are per 1,000 persons living except infant mortality, which is per 1,000 births.

The more important references will be found in the sections relating to phthisis, hospitals, housing, sewerage and dairies and cowsheds.

HAYES URBAN DISTRICT.

Medical Officer of Health, J. W. Higginson, M.R.C.S
L.R.C.P.

Area in acres. 3,311

Census, 1901. *Estimated*, 1908.
Population . . . 2,594 . . . 3,500

	1905.	1906.	1907.	1908.
Birth-rate	32·6	29·3	35·0	29·4
Recorded death-rate	12·6	16·6	14·6	10·2
Infant mortality ..	61	125	52	76
Phthisis death-rate	1·00	1·33	1·00	0·28
Scarlet fever ..	—	1·33	1·33	—
Diphtheria and	Case-rate	3·00	3·6	—
M. Croup				
Enteric fever ..				
Scarlet fever ..	—	—	—	—
Diphtheria and	Death-rate	0·66	—	—
M. Croup				
Enteric fever ..				

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

See the sections of this report as to enteric fever, isolation hospitals, housing, sewerage and water supply.

HENDON URBAN DISTRICT.

Medical Officer of Health, F. W. Andrew, M.R.C.S., L.R.C.P.

Area in acres 8,382

Census, 1901. Estimated, 1908.

Population	{ District	21,685	31,784
	{ Institutions	765	655

	1905.	1906.	1907.	1908.
Birth-rate	27·7	25·5	24·4	24·7
Recorded death-rate	11·7	10·9	10·3	10·0
Infant mortality ..	115	102	89	91
Phthisis death-rate	0·47	0·61	0·79	0·91
Scarlet fever ..	3·53	4·21	2·31	3·49
Diphtheria and	1·25	0·68	1·48	1·22
M. Croup				
Enteric fever..	0·27	0·21	0·10	0·06
Scarlet fever..	0·11	0·07	—	0·03
Diphtheria and	—	0·18	0·20	0·09
M. Croup				
Enteric fever..	—	0·03	0·03	0·03

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

References to this district will be found in the sections of this report relating to infantile mortality, scarlet fever, diphtheria, phthisis, isolation hospitals, housing, sewerage, dairies and cowsheds, and medical inspection of school children.

HESTON AND ISLEWORTH URBAN DISTRICT

Medical Officer of Health, E. J. Steegmann, M.B., D.P.

Area in acres. 6,859

Census, 1901. Estimated, 1908.

Population . . . 30,863 34,895

	1905.	1906.	1907.	1908.
Birth-rate	29·3	33·5	33·0	34·7
Recorded death-rate	13·5	15·1	14·2	15·9
Infant mortality . .	127	134	88	107
Phthisis death-rate	0·91	0·91	0·93	1·03
Scarlet fever.. } Case-rate	2·42	2·04	2·33	2·81
Diphtheria and M. Croup } Case-rate	3·00	2·01	3·46	1·29
Enteric fever.. } Case-rate	0·22	0·20	0·17	0·17
Scarlet fever.. } Death-rate	—	—	0·11	—
Diphtheria and M. Croup } Death-rate	0·37	0·08	0·08	0·17
Enteric fever.. } Death-rate	—	0·03	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

See also sections dealing with general death-rate, infant mortality, scarlet fever, whooping cough, tenement houses, canal boats, movable dwellings, dairies and cowsheds, and medical inspection of school children

HORNSEY (BOROUGH).

Medical Officer of Health, H. Coates, M.D., D.P.H.

Area in acres 2,875

Census, 1901. Estimated, 1908.

Population .. 72,056 90,814

	1905.	1906.	1907.	1908.	
Birth-rate	18·3	18·4	16·8	16·3	
Recorded death-rate	8·1	8·8	8·4	8·2	
Infant mortality ..	67	84	76	63	
Phthisis death-rate	0·68	0·54	0·55	0·58	
Scarlet fever	Case-rate	3·06	4·73	3·14	2·63
Diphtheria and M. Croup		1·79	1·80	1·08	1·02
Enteric fever		0·23	0·28	0·12	0·09
Scarlet fever	Death-rate	0·03	0·06	0·04	0·03
Diphtheria and M. Croup		0·09	0·14	0·09	0·09
Enteric fever		0·02	0·05	0·04	0·02

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

Hornsey Borough is referred to in the sections of this report relating to whooping cough, phthisis, isolation hospitals, and medical inspection of school children.

KINGSBURY URBAN DISTRICT.

Medical Officer of Health, F. W. Andrew, M.R.C.S., L.R.C.P.

Area in Acres 1,829

Census, 1901. *Estimated*, 1908.

Population .. 757 820

	1905.	1906.	1907.	1908.
Birth-rate	22·5	16·1	11·0	23·1
Recorded death-rate	11·2	11·1	14·7	6·0
Infant mortality ..	111	76	222	52
Phthisis death-rate	—	—	—	—
Scarlet fever	—	2·48	—	1·22
Diphtheria and	3·75	—	—	—
M. Croup				
Enteric fever	—	—	—	—
Scarlet fever	—	2·48	—	—
Diphtheria and	—	—	—	—
M. Croup				
Enteric fever	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

The figures of this district are so small that yearly rates are liable to marked fluctuation.

RUISLIP-NORTHWOOD URBAN DISTRICT.

Medical Officer of Health, L. W. Hignett, M.B., M.R.C.S.,
D.P.H.

Area in acres 6,585

Census, 1901. Estimated, 1908.

Population .. 3,566 5,656

	1905.	1906.	1907.	1908.
Birth-rate	25·4	25·2	20·0	21·5
Recorded death-rate	7·0	8·2	8·0	7·2
Infant mortality ..	69	58	37	65
Phthisis death-rate	1·77	1·05	0·93	0·53
Scarlet fever	0·22	3·99	3·56	0·35
Diphtheria and	0·22	0·21	1·12	0·17
M. Croup				
Enteric fever ..	—	—	—	—
Scarlet fever	—	—	0·18	—
Diphtheria and	—	—	0·56	0·17
M. Croup				
Enteric fever	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

In the earlier part of this report references to this district will be found in the sections relating to isolation hospitals, sewerage, water supply, and dairies, cowsheds and milkshops.

SOUTHALL-NORWOOD URBAN DISTRICT.

Medical Officer of Health, J. D. Windle, M.D., Ch.B., M.R.C.S.

Area in acres 2,575

Census, 1901. Estimated, 1908.

Population (District)	10,365	22,371
„ (Asylum)	2,835	2,584

	1905.	1906.	1907.	1908.		
Birth-rate	32·5	33·0	31·6	29·5		
Recorded death-rate	10·3	12·9	10·1	9·8		
Infant mortality ..	100	154	94	95		
Phthisis death-rate	0·67	0·69	0·70	0·85		
Scarlet fever	} Case-rate	3·89	5·27	1·78	2·41	
Diphtheria and		} M. Croup	1·63	1·65	1·12	0·85
Enteric fever			0·16	0·47	0·09	0·04
Scarlet fever	} Death-rate	0·05	0·10	—	0·04	
Diphtheria and		} M. Croup	0·11	0·05	0·18	0·04
Enteric fever			—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district is referred to in the sections of this report relating to scarlet fever, diphtheria, enteric fever, phthisis, isolation hospitals, housing, movable dwellings, canal boats, sewerage, water supply and dairies.

SOUTHGATE URBAN DISTRICT.

Medical Officer of Health, A. Sidney Ransome, B.A.,
M.B., D.P.H.

Area in acres 3,597

Census, 1901. Estimated, 1908.

Population .. 14,993 32,000

	1905.	1906.	1907.	1908.
Birth-rate	20·6	22·0	21·2	20·6
Recorded death-rate	7·9	10·8	7·6	7·5
Infant mortality ..	77	106	72	56
Phthisis death-rate	0·40	0·35	0·21	0·56
Scarlet fever ..	3·08	3·41	5·19	5·78
Diphtheria and	Case-rate	1·21	1·12	1·50
M. Croup				
Enteric fever ..				
	0·17	3·09	0·03	—
Scarlet fever ..	Death-rate	0·07	—	0·18
Diphtheria and				
M. Croup				
Enteric fever ..	0·04	0·35	0·03	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district will be found referred to in the sections of this report relating to diphtheria, isolation hospitals, housing, sewerage, water supply and house refuse disposal.

STAINES URBAN DISTRICT.

Medical Officer of Health, F. C. Tothill, M.B., C.M., D.P.H.

Area in acres 1918.

Census, 1901. Estimated, 1908.
Population .. 6,688 7,218

	1905.	1906.	1907.	1908.
Birth-rate	22·8	24·2	20·8	21·9
Recorded death-rate	11·0	11·3	11·0	10·1
Infant mortality ..	82	146	112	69
Phthisis death-rate	0·29	0·42	0·96	0·27
Scarlet fever ..	3·05	0·42	3·03	—
Diphtheria and	Case-rate	0·85	0·41	0·69
M. Croup				
Enteric fever ..				
Scarlet fever ..	0·29	—	—	0·13
Diphtheria and	Death-rate	0·28	—	—
M. Croup				
Enteric fever ..				

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

References to this district will be found in the sections of this report relating to scarlet fever, isolation hospitals, housing, common lodging houses, sewerage, dairies and cowsheds.

SUNBURY URBAN DISTRICT.

Medical Officer of Health, W. L. Byham, L.R.C.S., L.R.C.P.

Area in acres .. 2,659.

Census, 1901. Estimated, 1908.
Population 4,544 4,730

	1905.	1906.	1907.	1908.
Birth-rate	29·0	24·5	26·2	23·0
Recorded death-rate	12·2	15·1	11·7	13·5
Infant mortality ..	123	95	73	64
Phthisis death-rate	1·05	1·49	0·42	1·69
Scarlet fever	Case-rate 4·21	1·70	1·71	0·84
Diphtheria and M. Croup				
Enteric fever				
Scarlet fever	Death-rate 0·21	—	—	—
Diphtheria and M. Croup				
Enteric fever				

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

See the sections of this report relating to diphtheria, phthisis, hospitals, housing, sewerage, and milkshops and dairies.

TEDDINGTON URBAN DISTRICT.

Medical Officer of Health, Th. Günther, M.D.

Area in acres.. .. 1,214

Census, 1901. Estimated, 1908.

Population .. 14,037 18,125

	1905.	1906.	1907.	1908
Birth-rate	23·3	25·7	21·8	24·3
Recorded death-rate	11·5	14·0	10·1	10·2
Infant mortality ..	110	121	64	61
Phthisis death-rate	1·40	1·11	0·78	0·44
Scarlet fever	1·40	2·47	2·57	1·93
Diphtheria and M. Croup	0·24	0·29	0·44	1·13
Enteric fever	0·12	0·35	—	—
Scarlet fever	—	—	0·11	—
Diphtheria and M. Croup	—	—	0·16	0·16
Enteric fever	—	0·05	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

Teddington is referred to in the sections of this report relating to hospitals, housing, sewerage, water supply, milkshops and dairies, and house refuse collection.

TOTTENHAM URBAN DISTRICT.

Medical Officer of Health, J. F. Butler-Hogan, B.A.,
M.D., D.P.H., LL.D.

Area in acres 3,014

Census, 1901. Estimated, 1908.
Population .. 102,541 143,383

	1905.	1906.	1907.	1908.
Birth-rate	28·9	27·2	27·4	26·3
Recorded death-rate	12·5	12·4	11·9	11·0
Infant mortality ..	116	131	100	95
Phthisis death-rate	0·68	0·55	0·48	0·49
Scarlet fever	3·06	3·40	5·23	5·06
Diphtheria and	0·94	0·9	0·72	1·03
M. Croup				
Enteric fever	0·35	0·46	0·28	0·16
Scarlet fever	0·04	0·13	0·07	0·09
Diphtheria and	0·12	0·09	0·08	0·13
M. Croup				
Enteric fever	0·04	0·03	0·02	0·04

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district will be found referred to in the sections of this report relating to infantile mortality, scarlet fever, enteric fever, measles, phthisis, isolation hospitals, sewerage, dairies and cowsheds, and medical inspection of school children.

TWICKENHAM URBAN DISTRICT.

Medical Officer of Health, W. Marston Clark, M.R.C.S.,
D.P.H.

Area in acres 2,421

Census, 1901. Estimated, 1908.
Population .. 20,991 27,000

	1905.	1906.	1907.	1908.
Birth-rate	27·4	30·0	28·6	27·8
Recorded death-rate	13·4	13·8	13·1	12·2
Infant mortality ..	127	133	112	93
Phthisis death-rate	0·73	1·14	1·00	0·92
Scarlet fever	1·61	3·03	2·35	2·66
Diphtheria and	0·38	0·92	0·66	0·59
M. Croup	0·07	0·22	0·18	0·03
Enteric fever	—	0·03	—	—
Scarlet fever	0·03	0·08	0·07	0·03
Diphtheria and	0·03	—	0·03	0·03
M. Croup	—	—	—	—
Enteric fever	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

Twickenham is referred to in the sections of this report relating to infantile mortality, whooping cough, isolation hospitals, sewerage, and medical inspection of school children.

UXBRIDGE URBAN DISTRICT.

Medical Officer of Health, J. L. Lock, M.A., M.B., B.C.,
M.R.C.S., L.R.C.P.

Area in acres 868

Census, 1901. Estimated, 1908.
Population .. 8,585 9,450

	1905.	1906.	1907.	1908.
Birth-rate	28·5	27·2	26·2	24·1
Recorded death-rate	17·3	16·2	13·9	15·0
Infant mortality ..	110	118	89	105
Phthisis death-rate	1·74	1·18	1·49	1·27
Scarlet fever ..	0·87	1·29	3·30	2·43
Diphtheria and	0·87	1·72	0·95	0·42
M. Croup	0·10	0·10	0·10	0·31
Enteric fever..	—	0·10	—	—
Scarlet fever ..	—	0·10	—	—
Diphtheria and	0·10	0·10	0·10	—
M. Croup	—	—	—	—
Enteric fever..	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district is referred to in the sections of this report relating to the general death-rate, enteric fever, phthisis, tenement houses, movable dwellings, sewerage, water supply, house refuse collection and milkshops and dairies.

WEALDSTONE URBAN DISTRICT.

Medical Officer of Health, G. H. Butler, L.R.C.P.
M.R.C.S.

Area in acres 1,061

Census, 1901. Estimated, 1908.
Population .. 5,901 11,775

	1905.	1906.	1907.	1908.
Birth-rate	27·1	28·1	26·4	25·7
Recorded death-rate	8·9	7·9	8·3	7·8
Infant mortality ..	87	92	78	89
Phthisis death-rate	0·83	0·65	0·70	0·76
Scarlet fever..	3·42	2·69	1·59	2·97
Diphtheria and	0·20	0·2	1·14	0·33
M. Croup	—	—	0·26	0·08
Enteric fever..	—	—	—	—
Scarlet fever ..	—	—	—	—
Diphtheria and	—	—	—	—
M. Croup	—	—	0·08	—
Enteric fever..	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

References to this district are to be found earlier in this report in the sections dealing with infant mortality, scarlet fever, measles, whooping cough, phthisis, housing, sewerage and dairies and cowsheds.

WEMBLEY URBAN DISTRICT.

Medical Officer of Health, C. E. Goddard, M.D.

Area in acres 4,564

Census, 1901. Estimated, 1908.

Population .. 4,519 9,606

	1905.	1906.	1907	1908.
Birth-rate	26·4	28·6	20·1	24·3
Recorded death-rate	9·3	8·8	10·0	7·2
Infant mortality ..	134	81	89	89
Phthisis death-rate	1·01	0·66	0·60	0·52
Scarlet fever	5·25	3·16	2·29	0·41
Diphtheria and	1·01	0·50	0·36	—
M. Croup	0·33	—	0·24	—
Enteric fever	—	—	—	—
Scarlet fever..	—	—	—	—
Diphtheria and	—	0·16	0·12	—
M. Croup ..	0·17	—	0·12	—
Enteric fever	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

References to this district will be found in the sections of this report relating to phthisis, isolation hospitals, housing, canal boats, sewerage and dairies, and cowsheds.

WILLESDEN URBAN DISTRICT.

Medical Officer of Health, W. Butler, M.B., C.M., D.P.H.

Area in acres 4,384

Census, 1901. Estimated, 1908.

Population 114,811 149,035

	1905.	1906.	1907.	1908.
Birth-rate	29·8	30·1	29·4	27·5
Recorded death-rate	12·4	11·8	11·8	10·8
Infant mortality ..	110	111	102	91
Phthisis death-rate	1·03	0·98	0·95	0·80
Scarlet fever	2·82	4·49	4·44	4·94
Diphtheria and	1·92	2·01	1·76	1·44
M. Croup				
Enteric fever	0·29	0·32	0·19	0·27
Scarlet fever	0·03	0·07	0·13	0·09
Diphtheria and	0·09	0·11	0·12	0·09
M. Croup				
Enteric fever	0·08	0·04	0·02	0·05

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

Willesden is referred to in the sections of this report relating to scarlet fever, enteric fever, diphtheria, measles, isolation hospitals, housing, common lodging houses, movable dwellings, sewerage, and medical inspection of school children.

WOOD GREEN URBAN DISTRICT.

Medical Officer of Health, C. H. Conolly, M.R.C.S., &c.

Area in acres 1,625

Census, 1901. Estimated, 1908.

Population .. 34,233 50,500

	1905.	1906.	1907.	1908.
Birth-rate	26·8	26·7	29·5	25·3
Recorded death-rate	10·0	10·6	11·2	9·0
Infant mortality ..	84	103	69	81
Phthisis death-rate	0·64	0·76	0·73	0·53
Scarlet fever	Case-rate 2·73	4·86	4·79	2·89
Diphtheria and M. Croup				
Enteric fever				
Scarlet fever ..	Death-rate 0·02	0·15	—	0·01
Diphtheria and M. Croup				
Enteric fever				
	0·41	0·34	0·22	0·13
	0·18	0·19	0·16	0·03
	0·02	0·02	0·02	0·07

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district will be found referred to in the sections of this report relating to infant mortality, isolation hospitals, movable dwellings, house refuse disposal, and medical inspection of school children.

HENDON RURAL DISTRICT.

Medical Officer of Health, R. Leslie Romer, M.R.C.S.,
L.R.C.P.

Area in acres, 11,321

Census, 1901. Estimated, 1908.

Population .. 8,647 12,924

	1905.	1906.	1907.	1908.
Birth-rate	18·2	17·8	17·6	19·4
Recorded death-rate	8·7	8·8	7·8	8·5
Infant mortality ..	44	82	41	71
Phthisis death-rate	0·54	0·61	0·40	—
Scarlet fever	2·43	2·87	3·36	1·39
Diphtheria and	1·97	1·21	0·73	1·06
M. Croup	0·27	0·17	0·24	0·23
Enteric fever ..	—	—	—	0·07
Scarlet fever ..	0·18	—	—	—
Diphtheria and	0·09	0·08	—	0·07
M. Croup				
Enteric fever				

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district is referred to in the sections of this report relating to housing, movable dwellings, dairies, cowsheds and milkshops.

SOUTH MIMMS RURAL DISTRICT.

Medical Officer of Health, W. Gruggen, L.R.C.P.,
L.F.P.S., D.P.H.

Area in acres 6,105

Census, 1901. Estimated, 1908.
Population .. 2,671 2,867

	1905.	1906.	1907.	1908.
Birth-rate	24·0	21·7	20·4	23·0
Recorded death-rate	14·7	11·0	7·3	12·9
Infant mortality ..	149	82	34	75
Phthisis death-rate	0·71	0·71	0·70	0·69
Scarlet fever	2·51	3·56	5·63	4·18
Diphtheria and	1·07	2·13	2·46	5·23
M. Croup	—	—	—	—
Enteric fever	—	—	—	—
Scarlet fever	—	—	—	—
Diphtheria and	0·36	—	0·35	0·34
M. Croup	—	—	—	—
Enteric fever	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

Reference is made to this district in the sections relating to diphtheria, housing, dairies, cowsheds and milkshops.

STAINES RURAL DISTRICT.

Medical Officer of Health, C. Dwight Morris, M.R.C.S.,
L.R.C.P., L.S.A.

Area in acres.. .. 17,964

Census, 1901. Estimated, 1908.

Population .. 18,095 22,804

	1905.	1906.	1907.	1908.
Birth-rate	28·8	24·0	26·3	26·3
Recorded death-rate	11·5	12·1	10·8	13·2
Infant mortality ..	102	112	97	136
Phthisis death-rate	0·80	1·05	0·74	0·52
Scarlet fever	Case-rate. } 0·55	2·43	3·45	3·68
Diphtheria and M. Croup				
Enteric fever				
Scarlet fever	Death-rate } —	0·04	0·08	0·13
Diphtheria and M. Croup				
Enteric fever				
	0·30	0·18	0·39	0·21
	—	—	—	0·04

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

This district is referred to in the sections of this report relating to infant mortality, scarlet fever, diphtheria, measles, isolation hospitals, housing, movable dwellings, sewerage, water supply, dairies, cowsheds and milkshops and house refuse collection.

UXBRIDGE RURAL DISTRICT.

Medical Officer of Health, A. Charpentier, M.D., D.P.H.

Area in acres 13,519

Census, 1901. Estimated, 1908.

Population .. 11,058 13,570

	1905.	1906.	1907.	1908.
Birth-rate	29·7	28·1	27·8	25·1
Recorded death-rate	13·0	14·9	10·6	11·8
Infant mortality ..	76	181	92	99
Phthisis death-rate	1·30	1·33	0·51	0·88
Scarlet fever	2·11	5·33	5·39	1·32
Diphtheria and M. Croup	1·22	1·09	0·44	0·36
Enteric fever	0·56	0·23	—	—
Scarlet fever	—	0·08	—	—
Diphtheria and M. Croup	0·16	0·08	—	—
Enteric fever	—	—	—	—

Rates are per 1,000 persons living, except infant mortality, which is per 1,000 births.

References to this district will also be found in the sections of this report relating to scarlet fever, phthisis, housing and dairies cowsheds, and milkshops.

TABLES.

1. Table showing corrections made in each district for deaths of non-residents, and for deaths of residents occurring outside the districts, the latter, for most part, supplied by the County Council.
2. Table of causes of death recorded in the district reports.
3. Table showing sanitary work carried out in each district.

ADMINISTRATIVE COUNTY OF MIDDLESEX.—TABLE I.
VITAL STATISTICS OF EACH DISTRICT IN THE COUNTY DURING 1908.

District.	1	Population estimated to Middle of 1908.	Births.		Total Deaths Registered in the District.				Deaths of Non-residents registered in the District.	Deaths of residents registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the District.		
			Number.	Rate per 1,000 living.	Under 1 Year of Age.		At all Ages.				Number.	Rate per 1,000 living.	
					Number.	Rate per 1,000 Births registered.	Number.	Rate per 1,000 living.					
		2	3	4	5	6	7	8	9	10	11	12	13
<i>Urban.</i>													
Acton	55,000	1,568	28.5	174	111	592	10.76	31	1	133	724	13.16
Brentford	16,194	464	28.6	56	120	174	10.75	..	..	67	241	14.88
Chiswick	36,377	898	24.6	96	106	351	9.65	11	16	108	443	12.17
Ealing (<i>Borough</i>)	51,000	1,251	24.5	101	80	497	9.74	22	..	76	573	11.23
Edmon- ton { District	..	60,182	2,000	32.1	213 ¹	106	902	14.50	376	299	129	732	12.16
ton { Institutions	..	2,004											
Enfield	56,185	1,420	25.2	134	94	621	11.05	131	60	64	625	11.12
Feltham	5,900	155	26.2	20	129	75	12.71	5	..	9	84	14.23
Finchley	39,499	888	22.4	54	60	289	7.31	25	6	56	339	8.58
Friern { District	..	10,422	333	31.9	33	99	276	21.40	175	175	19	120	11.51
Barnet { Asylum	..	2,473											
Greenford	1,074	31	28.8	3	96	13	12.10	..	2	6	17	15.83
Hampton	9,500	206	21.6	16	77	80	8.42	..	1	14	93	9.79
Hampton Wick	2,665	40	15.0	6	150	30	11.26	..	3	9	36	13.51

Hanwell	..	20,682	493	23.8	53	107	173	8.37	6	..	32	205	9.91
Harrow	..	16,132	346	21.4	32	92	109	6.76	11	6	11	114	7.07
Hayes	..	3,500	103	29.4	8	77	35	10.00	4	2	3	36	10.29
Hendon { District	..	31,784	787	24.7	72	91	376	11.50	122	90	33	319	10.03
Hendon { Institutions	..	655											
Heston & Isleworth	..	34,895	1,211	34.7	130 ²	107	801	22.9	344	273	30	558	15.99
Hornsey (Borough)	..	90,814	1,485	16.3	95	63	654	7.20	17	14	112	752	8.28
Kingsbury	..	820	19	23.1	1	52	3	3.67	..	..	2	5	6.09
Ruislip-Northwood	..	5,656	122	21.5	8	65	39	6.89	6	6	8	41	7.25
Southall- { District	..	22,371	660	29.5	63	95	448	17.96	227	227	32	221	9.88
Norwood { Asylum	..	2,584											
Southgate	..	32,000	659	20.6	37	56	207	6.47	12	8	41	240	7.50
Staines	..	7,218	158	21.9	11	69	65	9.01	..	..	8	73	10.11
Sunbury	..	4,730	109	23.0	7	64	53	11.21	..	..	11	64	13.53
Teddington	..	18,125	442	24.3	27	61	161	8.88	19	..	29	185	10.21
Tottenham	..	143,383	3,778	26.3	361	95	1,545	10.77	368	235	271	1,581	11.02
Twickenham	..	27,000	751	27.8	70	93	289	10.71	37	8	50	331	12.25
Uxbridge	..	9,450	228	24.1	24	105	111	11.74	4	..	31	142	15.02
Wealdstone	..	11,775	303	25.7	27	89	78	6.62	..	..	14	92	7.81
Wembley	..	9,606	234	24.3	21	89	65	6.76	..	5	10	70	7.29
Willesden	..	149,035	4,095	27.5	376	91	1,453	9.75	255	11	181	1,623	10.89
Wood Green	..	50,500	1,282	25.3	105	81	384	7.60	11	3	76	457	9.05
Rural.													
Hendon	..	12,924	251	19.4	18	71	95	7.35	3	2	17	110	8.51
South Mimms	..	2,867	66	23.0	5	75	37	12.90	6	3	3	37	12.90
Staines	..	22,804	601	26.3	82	136	319	13.99	65	27	10	302	13.24
Uxbridge	..	13,570	341	25.1	34	99	199	14.66	57	43	5	161	11.86

¹ Edmonton, not including 14 deaths of infants of Edmonton mothers registered outside the district.
² Heston and Isleworth, not including 17 deaths of infants of non-resident women.

APPENDIX TO TABLE I.

SHOWING CORRECTIONS MADE FOR DEATHS IN INSTITUTIONS.

1. Institutions in the County the population and deaths in which have been as far as possible *excluded* :—

Strand Union Workhouse	..	situated in Edmonton.
Colney Hatch Lunatic Asylum	„	Friern Barnet.
Hanwell Lunatic Asylum	..	„ Southall-Norwood.
Northern Fever Hospital, M.A.B.	„	Southgate.
North-Eastern Fever Hospital, M.A.B., except beds reserved for Tottenham	.. ..	„ Tottenham.

2. Institutions outside the County the deaths and average population in which of Middlesex residents have been as far as possible *included*, and *distributed* to the various districts to which they rightly belong :—

County Lunatic Asylum	situated at Wandsworth.
County Lunatic Asylum	„ Napsbury.
Barnet Union Workhouse	„ in Barnet U.D.

Distributed to	{	Finchley.
		Friern Barnet.
		South Mimms.

Kingston Union Workhouse, situated in Kingston U.D.

Distributed to	{	Hampton.
		Hampton Wick.
		Teddington.

London Hospitals, situated in London.

Other outside hospitals, *e.g.*, Richmond.

3. Institutions within the County of Middlesex the deaths in which have been *distributed* amongst the districts in which the persons previously resided :—

Brentford Union Workhouse, situated in Heston and Isleworth.

Distributed amongst	{	Acton.
		Brentford.
		Chiswick.
		Ealing.
		Greenford.
		Hanwell.
		Heston and Isleworth.
	{	Twickenham.

Hendon Union Workhouse, situated in Hendon.

Distributed amongst	{	Harrow.
		Hendon Urban.
		Hendon Rural.
		Kingsbury.
		Wealdstone.
		Wembley.

Staines Union Workhouse, situated in Staines Rural District.

Distributed amongst	{	Feltham Urban District.
		Staines Rural District.
		Sunbury Urban District.
		Staines Urban District.

Uxbridge Union Workhouse, situated in Uxbridge Rural District.

Distributed amongst	{	Hayes Urban.
		Ruislip-Northwood.
		Uxbridge Rural District.
		Uxbridge Urban District.
		Southall-Norwood District.

Tottenham Hospital, situated in Tottenham.

4. Institutions within the County some of the deaths in which are *excluded* from the County, and others *distributed* amongst districts in the County :—

Edmonton Union Workhouse, situated in Edmonton.

(a) Excluded, those belonging to	{	Cheshunt U.D.
		Waltham Cross U.D.

(b) Remainder distributed amongst	{	Edmonton.
		Enfield.
		Hornsey.
		Wood Green.
		Southgate.
		Tottenham.

Enfield Workhouse.

COUNTY OF MIDDLESEX.—TABLE II.

CAUSES OF DEATH RECORDED IN THE DISTRICT REPORTS FOR 1908.

	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria, including Membranous Group.	Group.	Fever.			Epidemic Influenza.	Cholera.	Plague.	Diarrhoea.	Enteritis.	Puerperal Fever.	Erysipelas.
							Typhus.	Enteric.	Other continued.							
<i>Urban.</i>																
Acton	38	15	15	7	..	..	2	..	14	..	..	46	17	..	..
Brentford	..	1	..	1	2	..	..	1	..	2	..	..	5	12	1	..
Chiswick	..	1	..	11	2	..	..	2	..	..	..	..	10	8	1	..
Ealing (<i>Borough</i>)	..	1	1	12	5	..	..	1	..	12	..	..	6	11	1	2
Edmonton	..	19	12	15	27	..	..	6	..	9	..	..	41	2	2	..
Enfield	..	6	5	3	31	1	..	1	..	11	..	..	27	4	2	1
Feltham	..	4	..	..	1	1	..	..	..	..	..	..	9	1	1	..
Finchley	..	10	4	3	4	..	..	..	..	14	..	..	5	3	1	..
Friern Barnet..	2	2	1	..	..	..	..	..	..	..	..	4	1	..
Greenford	1	..	..	..	..	..	..
Hampton	1	..	..	..	..	..	..	..	..	6	1	..	..

[illegible]

* Deaths of residents occurring beyond the district are not included.

COUNTY OF MIDDLESEX.—TABLE II.—*continued.*CAUSES OF DEATH RECORDED IN THE DISTRICT REPORTS FOR 1908—*continued.*

	Phthisis (Pulmonary Tuberculosis).	Other Tubercular Diseases.	Cancer, Malignant Disease.	Bronchitis.	Pneumonia.	Pleurisy.	Other Diseases of Respiratory Organs.	Alcoholism, Cirrhosis of Liver.	Veneral Diseases.	Premature Birth.	Diseases and Accidents of Parturition.	Heart Diseases.	Accidents.	Suicides.	All other causes.
<i>Urban.</i>															
Acton ..	56	28	48	50	55	1	17	12	..	25	5	45	12	1	216
Brentford ..	16	10	9	23	24	1	2	4	1	12	2	25	12	2	73
Chiswick ..	29	15	39	39	35	2	6	6	..	12	1	53	13	3	153
Ealing (<i>Borough</i>) ..	40	13	42	36	36	2	..	6	..	19	1	58	15	7	246
Edmonton ..	54	39	35	47	76	6	2	10	4	48	2	28	24	5	219
Enfield ..	46	19	43	79	27	..	2	6	..	21	1	58	22	6	203
Feltham ..	7	6	7	2	4	1	..	1	..	1	1	6	2	1	28
Finchley ..	21	8	21	27	22	..	..	2	..	7	6	24	10	8	139
Friern Barnet ..	7	3	14	9	8	1	1	2	1	2	2	6	2	1	51
Greenford ..	1	..	1	..	2	..	..	..	..	..	..	1	1	1	9
Hampton ..	11	2	6	6	7	..	2	1	1	1	..	13	3	..	32

Hampton Wick	..	3	..	9	4	3	4	..	2	..	2	3	3	2	..	11
Hanwell	..	13	..	1	15	13	15	..	13	..	15	3	3	5	..	69
Harrow	..	13	..	1	1	10	1	..	15	..	1	2	2	..	..	34
Hayes..	..	1	..	1	3	1	3	..	1	..	1	6	2	..	..	14
Hendon	..	29	..	15	19	26	19	..	12	..	1	23	9	4	..	123
*Heston and Isleworth	..	36	..	8	30	24	19	..	19	..	2	49	10	5	..	183
Hornsey (<i>Borough</i>)	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	4
Kingsbury	..	..	..	..	..	..	..	..	..	..	1	3	..	..	..	15
Ruislip-Northwood	..	..	..	..	..	..	..	..	..	..	1	10	..	..	..	67
Southall-Norwood	..	19	..	10	17	19	17	..	17	..	4	28	4	4	..	82
Southgate	..	18	..	9	31	9	12	..	7	..	2	9	4	2	..	31
Staines	..	2	..	2	4	9	2	..	2	..	1	3	3	3	..	22
*Sunbury	..	8	..	..	4	10	1	..	1	..	..	19	5	..	..	66
Teddington	..	8	..	10	14	17	17	..	5	..	1	163	32	10	..	566
Tottenham	..	71	..	93	94	103	132	..	12	..	13	35	9	2	..	127
Twickenham	..	25	..	11	24	23	17	..	3	..	2	10	11	2	..	47
Uxbridge	..	12	..	3	15	18	7	..	1	..	..	8	2	..	..	29
Wealdstone	..	9	..	4	7	5	8	..	1	..	4	7	4	2	..	20
Wembley	..	5	..	1	6	7	2	..	2	..	5	136	60	16	..	529
Willesden	..	120	..	33	112	110	154	..	8	..	9	43	12	3	..	140
Wood Green	..	27	..	16	42	61	19	..	4	..	2	..	..	..	..	..
<i>Rural.</i>																
Hendon	..	..	3	10	5	5	10	..	..	..	4	13	4	1	..	48
South Mimms	..	2	..	5	3	3	..	..	1	..	1	3	..	..	..	16
Staines	..	12	..	22	29	19	19	..	2	..	12	26	8	3	..	120
Uxbridge	..	12	12	8	18	6	6	..	3	..	5	13	6	2	..	57

* Deaths of residents occurring beyond the district are not included.

COUNTY OF MIDDLESEX.—TABLE III.—SANITARY WORK, 1908.

NAME OF SANITARY DISTRICT.	Inspections.*					Notices.			
	(1) Number of Premises In- spected on Complaint.	(2) Number of Premises In- spected in connection with Infectious Di- seases.	(3) Number of Premises under Periodical Inspection.	(4) Houses Inspected from House-to-House.	(5) Total Number of Inspec- tions and Re-inspec- tions made.	Cautionary or Intimation Notices Given.	Statutory Orders Issued.	Summonses Served.	Convictions Obtained.
<i>Urban.</i>									
Acton ..	1,583	621	333	661	9,936	1,282	1,032	1	3
Brentford ..	61	98	81	150	2,067	225	114	3	1
Chiswick ..	165	230	327	2,823	9,109	554	695	9	
Ealing (<i>Borough</i>) ..	138	194	366	382	9,174	472	450		8
Edmonton ..	591	570	394	372	13,470	2,978	352	8	2
Enfield ..	689	547	418	828	14,420	5,394	473	2	
Feltham ..	12	17	520	235	247	100	46		
Finchley ..	144	1,112	432	338	7,059	136	148		5
Friern Barnet ..	37	157	56	267	2,521	372	29	7	
Greenford..	70	1	28		100	72			
Hampton ..	45	24	55	65	2,136	138	3		
Hampton Wick ..	3	7	24	280	322	18			
Hanwell ..	69	62	68	843	3,283	245	124		

Harrow	100	80	104	6	111	59	17	..	..
Hayes	4	3	30	..	67	10	..	..	..
Hendon	176	306	212	60	2,493	421	109	5	..
Heston and Isleworth	37	147	376	110	17,713	3,238	344	1	1
Hornsey (Borough)	186	648	715	815	8,472	927	158	2	1
Kingsbury	2	1	65	87	100	9	..	..	..
Ruislip-Northwood	80	14	44	476	834	150	..	1	1
Southall-Norwood	92	156	99	235	1,938	215	3	1	1
Southgate	74	191	174	142	3,075	228	10	..	..
Staines	18	7	..	56	245	65	77	..	..
Sunbury	30	7	17	330	1,320	54	1	..	..
Teddington	33	183	157	167	2,800	75	9	..	..
Tottenham	613	900	598	2,033	21,790	1,256	1,039	5	5
Twickenham	41	123	177	3,539	6,761	1,230	126	1	1
Uxbridge	64	55	..	290	about	185	32	1	1
Wealdstone	22	33	63	469	3,500	186	4	..	..
Wembley	40	All premises where such cases occurred	As many as possible	150	1,232	163	18	1	..
Willesden	1,119	1,506	625	1,148	21,302	1,656	438	2	2
Wood Green	127	33	277	311	5,434	483	383	2	..
Rural.									
Hendon	93	156	93	402	2,169	409	13	..	..
South Mimms	9	23	80	43	155	4	..	..	..
Staines	87	24	646	1,546	4,087	268	59	3	3
Uxbridge	21	41	95	422	472	40	87	1	..

Rural.

* N.B.—(3) Includes all classes of premises under periodical supervision, such as Cowsheds, Dairies, Slaughterhouses, Workshops and Work-place, &c.

(5) Includes all visits and re-visits made by Sanitary Inspectors in connection with 1-4, and work place, etc.

	10	20	6	134	23	177	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10
Greenford	10	20	6	134	23	177	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10
Hampton	20	6	134	23	177	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10	
Hampton Wick	6	134	23	177	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10		
Hanwell	134	23	177	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10			
Harrow	23	177	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10				
Hayes	177	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10					
Hendon	252	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10						
Heston and Isleworth	262	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10							
Hornsey (Borough)	6	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10								
Kingsbury	7	129	5	153	58	483	981	224	28	714	73	119	8	247	10									
Ruislip-Northwood	129	5	153	58	483	981	224	28	714	73	119	8	247	10										
Southall-Norwood	5	153	58	483	981	224	28	714	73	119	8	247	10											
Southgate	153	58	483	981	224	28	714	73	119	8	247	10												
Staines	483	981	224	28	714	73	119	8	247	10														
Sunbury	981	224	28	714	73	119	8	247	10															
Teddington	224	28	714	73	119	8	247	10																
Tottenham	28	714	73	119	8	247	10																	
Twickenham	714	73	119	8	247	10																		
Uxbridge	73	119	8	247	10																			
Wealdstone	119	8	247	10																				
Wembley	8	247	10																					
Willesden	247	10																						
Wood Green	10																							
Hendon	119	8	247	10																				
South Mimms	8	247	10																					
Staines	247	10																						
Uxbridge	10																							

Harrow ..	..	..	13	..	7	quarterly †90	..	8	82 quarterly 24 twice	..	154
Hayes ..	..	..	4	..	4	16 quarterly fre-..	..	4	per quarter as fre-..	..	about 100
Hendon ..	30	30	16	6	8	quarterly fre-..	..	28	quently as possible	5	550
Heston and Isleworth	101	28	32	37	14	277	28	14	510	32	141
Hornsey (<i>Borough</i>)	..	..	41	19	9	103 fre- quently	..	3	29 fre- quently	..	66
Kingsbury ..	..	..	1	..	..	..	..	2	once a quarter	..	..
Ruislip-Northwood	2	..	3	1	2	..	..	19	60 twice a year	11	182
Southall-Norwood	43	20	18	9	5	119	9	7	17	4	200
Southgate ..	158	6	16	4	8	45	1	12	57	1	about 200
Staines ..	53	..	11	..	3	8	..	10	8	10	100
Sunbury ..	20	..	4	..	..	‡ 2 half- yearly	..	5	20	..	116
Teddington	..	..	13	..	7	21 three times	1	7	28	3	54
Tottenham	200	20	58	9	15	yearly	..	25	84	..	..
Twickenham	..	..	20	..	10	105	2	9	203	3	112
Uxbridge ..	..	..	15	6	7	§	3	..	..	2	..
Wealdstone	46	..	7	7	3	12	2	3	12	..	..
Wembley ..	7	||	5	2	6	quarterly	..	11	quarterly monthly	8	250
Willesden ..	6	..	67	23	9	¶ weekly	6	6	..	12	84
Wood Green	94	..	21	..	5	172	..	5	27	..	9
<i>Rural.</i>											
Hendon ..	103	6	10	3	9	weekly	2	33	half- yearly 89	15	449
South Mimms	..	..	3	..	2	8	..	10	40	..	140
Staines ..	5	..	19	5	..	28	**	33	81	..	about 702
Uxbridge ..	7	3	13	3	..	..	..	27	126	1	411

* Only two occupied by cows. † No register kept, but only one slaughter-house in district.
 § Weekly and more frequently if necessary. ¶ Inspected when possible during
 killing operations and day after. ** Bye-laws quite recently adopted.

COUNTY OF MIDDLESEX—TABLE III.—continued.—SANITARY WORK, 1908—continued.

NAME OF SANITARY DISTRICT.	Dairies and Milkshops.		Unsound Food.				Adulterated Food.	
	Number on Register.	Number of Inspections of Inspection. made and frequency of	Contraventions of Regulations.	(a) Animals seized (b) Articles or Parcels seized.	Condemned by Magistrate (a & b).	Articles or Parcels surrendered.	Samples taken (if any) by the District Local Authority.	Found adulterated.
<i>Urban.</i>								
Acton	76	152 twice yearly	..	a. 40 b. 141	a. .. b. ..	181	74	3
Brentford	50	60 quarterly	11	23	7	9	75	5
Chiswick	35	176 quarterly	..	..	..	25	..	..
Ealing (<i>Borough</i>)	44	221 quarterly	..	..	all	12	..	..
Edmonton	51	517	5	..	..	*	..	..
Enfield	74	4	33	..	..	29	..	..
Feltham	2	previous column	..	..	1	1	..	..
Finchley	See	154	..	..	+	+	..	..
Friern Barnet	14	18	2	1	61	..	..	..
Greenford .. ..	..	6	..	..	..	1 pig	..	..
Hampton	6	twice yearly	..	..	..	1	..	..
Hampton Wick	3	37	3	..	..	3	..	..
Hanwell	16	10	..	..	..	3	..	..
Harrow	10	12	..	..	..	..	..	..
Hayes	3	quarterly	..	..	..	..	..	..

	3	13	11	3	cases of fish	5	1
Hendon ..	29	frequently 2,483	68	..	11	..	..
Heston and Isleworth	51	236	17	..	21	..	..
Hornsey (<i>Borough</i>)	78	frequently frequently 20	..	..	..	..	..
Kingsbury	3	twice a year	..	..	..	..	..
Ruislip-Northwood	8	64	1	..	..	..	..
Southall-Norwood	26	83	10	..	..	..	..
Southgate	21	8	..	..	..	..	..
Staines ..	13	quarterly	1	..	..	..	..
Sunbury ..	5	quarterly	..	..	..	..	..
Teddington	24	quarterly	..	..	..	..	..
Tottenham	207	430	..	..	..	..	..
Twickenham	31	121	..	..	..	..	..
Uxbridge	..	..	..	..	..	..	..
Wealdstone	6	24	4	..	..	..	..
Wembley ..	14	quarterly	..	..	..	..	..
Willesden..	131	monthly 3 times a year	25	1	..	..	..
Wood Green	36	164	2	..	..	..	..
<i>Rural.</i>							
Hendon ..	27	63	8	various organs of animals	..	..	..
South Mimms	10	half-yearly	..	..	..	..	..
Staines ..	36	40	1	..	..	..	..
Uxbridge ..	30	93	1	..	..	..	..
		126		1	1	1	1

* 4 trunks herrings, 5 boxes blasters, 8 cod, 3 lots mixed fish, 9 bags onions, 1 barrel grapes, 1 trunk hake, 16 baskets cherries, 3 trunks haddock, 1 trunk whiting, 1 box kippers, 2 barrels apples, 1 lot bananas, 1 pod shrimps. † Unsound food destroyed:—1 carcase and organs of a heifer, 2 carcasses of pork, 3 ox livers, 1 pig's liver, 2 pairs sheep's lungs, abdominal organs of pig, forequarter of mutton, 1 piece of beef and 1 calf's head, 3 parcels of vegetables and 1 parcel of fruit, 1 box of kippers. ‡ Cowsheds once a month, dairies and retailers as often as possible. § 1 crate of bananas, 9 lbs. raspberries, 3 lbs. cherries, 91 lbs. codfish, 1 barrel crabs, 28 lbs. liver, 67 stones of pork. ¶ 1 pig, 100 lbs. beef and 3 pieces of ham.

COUNTY OF MIDDLESEX.—TABLE III.—continued.—SANITARY WORK, 1908—continued.

NAME OF SANITARY DISTRICT.	Offensive Trades.			Water Supply and Water Service.						Number of Samples obtained for analysis, (a) from Local Wells (b) from Public Supply.				
	Number of Premises in District.	Number of Inspections made.	Contraventions of By-laws.	Wells.			Percentage of Houses Supplied from Public Water Service.	Cisterns.			Draw-Taps placed on Mains.	Percentage of Houses Supplied on Constant System.		
				New Sunk.	Cleansed, Repaired, &c.	Closed as Polluted;		New, Provided.	Cleansed, Repaired, Covered, &c.					
<i>Urban.</i>													a.	b.
Acton ..	1	25	..	..	..	..	100	39	232	45	100	..	..	..
Brentford ..	2	10	..	..	..	..	100	4	9	75	100	..	..	..
Chiswick ..	1	4	..	..	..	..	100	..	9	45	100	..	..	..
Ealing (<i>Borough</i>) ..	Nil	..	..	..	..	..	99.3	..	21	10	all houses	..	..	..
Edmonton ..	..	..	..	..	1	..	..	13	70	..	..	..	..	..
Enfield ..	..	..	..	..	2	1	80	..	62	..	80	..	50	6
Feltham ..	..	..	..	..	..	..	100	6	166	..	100	..	..	12
Finchley ..	..	..	..	..	..	..	100	..	19	a few	100	..	..	..
Friern Barnet ..	..	..	..	..	..	..	80	..	..	..	80	..	..	..
Greenford ..	1	12	4	..	..	..	99.8	..	7	..	99.8	..	..	..
Hampton ..	1	1	..	..	..	..	95	..	3	..	95	..	..	..
Hampton Wick ..	..	..	..	..	1	1	..	..	..	..	..	..	..	..

Hanwell ..	..	..	..	..	..	..	..	..	1	..	99·8	..	..	4	..
Harrow ..	..	..	..	..	..	..	..	..	6	16	100	..	..	4	..
Hayes ..	..	..	..	..	..	..	..	..	..	..	95	..	..	..	..
Hendon ..	..	..	..	..	..	..	..	..	13	5	96	..	..	..	..
Heston and Isleworth	..	..	..	..	..	..	..	..	82	18	100	..	..	..	..
Hornsey (<i>Borough</i>)	..	..	..	..	..	..	..	..	72	7	100	..	..	..	36
Kingsbury ..	..	..	..	..	..	..	..	..	..	..	Practically all	..	..	..	..
Ruislip-Northwood	..	..	..	..	..	..	..	..	..	..	80	..	..	..	..
Southall-Norwood	..	..	..	..	..	..	..	..	29	..	99·9	..	..	..	1
Southgate ..	..	..	..	..	..	..	..	..	1	13	Practically all	..	..	5	..
Staines ..	..	..	..	..	..	..	..	..	..	..	96	..	..	3	..
Sunbury ..	..	..	..	..	..	..	..	..	9	..	95	..	..	3	..
Teddington	..	..	..	..	..	..	..	..	38	..	100	..	..	2	..
Tottenham	..	..	..	..	..	..	..	..	316	..	..	..	..	..	..
Twickenham	..	..	..	..	..	..	..	..	76	..	99·5	..	..	5	..
Uxbridge ..	..	..	..	..	..	..	..	..	..	..	Practically all	..	..	..	..
Wealdstone	..	..	..	..	..	..	..	..	..	..	all	..	..	..	..
Wembley ..	..	..	..	..	..	..	..	..	2	..	99	..	..	..	..
Willesden..	..	..	..	..	..	..	..	..	396	126	100	..	..	..	..
Wood Green	..	..	..	..	..	..	..	..	23	2	100	..	..	..	..
<i>Rural.</i>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hendon ..	..	..	..	..	..	..	..	..	7	..	99	..	..	..	..
South Mimms	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..
Staines ..	..	..	..	..	..	..	..	..	19	23	all	..	..	88	7
Uxbridge	13	..

COUNTY OF MIDDLESEX.—TABLE III.—continued.—SANITARY WORK, 1908—continued.

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Sanitary Work

NAME OF SANITARY DISTRICT.	Disinfection.			Dust.			Method of Disposal, (a) Destructor, (b) by Tipping, (c) Other, state method.
	Rooms Disinfected, (a) Ordinary infectious di- seases, (b) Phthisis.	Rooms Stripped and Cleaned.	Articles Disinfected or De- stroyed, (a) Ordinary infectious diseases (b) Phthisis.	New Bins provided.	How frequently is dust re- moved from each house?	Number of Complaints of Non-removal received.	
<i>Urban.</i>							
Acton ..	a. 527	112	a. 886	246	Weekly	6	a.
Brentford ..	b. 31	28	b. ..	63	ditto	..	a.
Chiswick ..	101	14	35	349	ditto	92	a.
Ealing (<i>Borough</i>) ..	135	18	2,665	136	ditto	43	a.
Edmonton ..	573	186	6,333	129	ditto	43	(b) Tipping on Council's sewage farm
Enfield ..	512	136	5,829	197	Most weekly and re- mainder fortnightly	26	(b) and (c) Part to brickmakers
Feltham ..	11	11	16	93	Once per week	1	.. b. ..
Finchley ..	314	20	6,410	95	Weekly	18	(c) Burning
Friern Barnet ..	97	84	291	178	ditto	18	b. ..
Greenford..	1	..	..	..	..	..	..
Hampton ..	22	42	148	32	ditto	1	b.* ..
Hampton Wick ..	4	..	..	5	ditto	6	b. ..
Hanwell ..	55	108	886	105	ditto	8	b. ..
Harrow ..	143	10	2,457	60	ditto	8	Tipped on farm and burnt.

Hayes	..	7	2	..	47	..	all	..	..	62	See remarks column Weekly	..	14	..	..
Hendon	..	177	13	..	47	..	..	..	..	62	See remarks column Weekly	..	14	..	..
Heston and Isleworth	..	131	6	..	6	..	1,310	..	..	174	ditto	..	..	..	..
Hornsey (<i>Borough</i>)	..	533	54	..	253	..	14,300	259	..	124	Once from houses, twice from flats each week	..	50	..	..
Kingsbury	..	1	..	..	..	..	5	..	..	..	..	..	..	..	..
Ruislip-Northwood	..	16	12	..	12	..	..	..	..	23	Weekly	..	9	..	..
Southall-Norwood	..	87	4	..	2	..	606	6	..	204	ditto	..	2	..	..
Southgate	..	266	17	..	203	..	1,166	62	..	67	ditto	..	17	..	..
Staines	..	7	2	..	11	..	..	..	..	52	ditto	..	2	..	..
Sunbury	..	7	2	..	9	..	..	..	..	54	Ditto fortnightly in Halliford and Charlton	..	7	..	..
Teddington	..	55	3	..	17	..	a. A quantity	..	..	..	Daily	..	..	..	..
Tottenham	..	994	110	..	820	..	19,681	..	..	269	Weekly	..	100	..	..
Twickenham	..	103	9	..	51	..	396	..	..	347	ditto	..	5	..	..
Uxbridge	..	76	30	..	2	..	No record kept	..	..	46	Partly weekly, partly fortnightly	..	..	..	..
Wealdstone	..	67	9	..	14	..	..	..	..	94	Weekly	..	56	..	..
Wembley	..	+	..	..	..	..	..	..	..	20	ditto	..	9	..	..
Willesden	..	1,299	101	..	86	..	27,025	..	..	165	ditto	..	120	..	..
Wood Green	..	223	6	..	173	..	2,845	25	..	295	Once per week	..	14	..	..
<i>Rural.</i>															
Hendon	..	31	..	..	7	..	No record kept	..	..	2	Weekly	See remarks column	56	..	..
South Mimms	..	16	..	..	16	..	..	..	..	..	..	..	..	..	..
Staines	..	86	16	..	66	..	1	..	..	18	See remarks column	..	..	..	..
Uxbridge	..	25	6	..	44	..	1	..	..	..	Fortnightly	..	16	..	..

* Destructor in course of erection.

† After all cases of infectious disease, cancer, and phthisis.

COUNTY OF MIDDLESEX.—TABLE III.—continued.—SANITARY WORK, 1908.—continued.

NAME OF SANITARY DISTRICT.	Sundry Nuisances Abated.							Remarks as to any other matters or in explanation of previous columns.
	Overcrowding.	Smoke.	Accumulations of Refuse.	Foul Ditches, Ponds, &c., and Stagnant Water.	Foul Pigs and other Animals.	Dampness.	Yards repaved or repaired.	Other Nuisances.
Urban.								
Acton ..	47	14	157	9	26	227	341	195
Brentford ..	20	2	4	..	10	5	66	..
Chiswick ..	3	..	11	..	..	40	83	310
Ealing (<i>Borough</i>) ..	15	6	65	6	27	38	232	205
Edmonton ..	30	6	44	6	17	224	57	20
Enfield ..	37	4	70	9	42	290	157	89
Feltham ..	4	1	6	3	..	2	1	7
Finchley ..	5	..	18	..	10	72	142	552
Friern Barnet ..	2	..	21	3	2	76	81	704
Greenford..	..	..	11	..	3	1	..	..
Hampton ..	..	4	20	..	6	26	1	5
								Proposed Bye-laws for slaughter houses being con- sidered by the Council ..

[illegible]

HARRISON AND SONS,
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M.O. $\frac{41}{1909}$

County Council of Middlesex.



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INCLUDING A
SUMMARY OF THE ANNUAL REPORTS OF THE
DISTRICT MEDICAL OFFICERS OF HEALTH.

BY

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County Medical Officer of Health.

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